UNDERGROUND STORAGE TANK

CLOSURE REPORT

640 Brooklyn Avenue
Oakland, CA 94606
Job No. 9325
April 16, 2013

Prepared For:

Jeffrey Jung
109 Shooting Star Isle
Foster City, CA 94404

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Registered Environmental Assessor 08006

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General Engineering Contractors License No. 616521

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1. SITE LOCATION

The subject residential property is located at 640 Brooklyn Avenue between Haddon Road and Hanover Avenue in Oakland, California. Figure 1 attached shows the general site location.

2. SITE HISTORY

One underground storage tank (UST) containing diesel was located beneath the sidewalk along the Brooklyn Avenue frontage of the property. The tank had a capacity of approximately 750 gallons, measuring approximately 8 feet in length by 4 feet in diameter, and was constructed of single wall bare steel. The fill port was located on the east end of the tank. The age of the tank is unknown. The owner had no prior knowledge of the tank nor is there any indication of previous site investigation activities. The approximate location of the tank as well as nearby streets is shown on the attached Figure 2.

3. TANK REMOVAL

In November 2012, Golden Gate Tank Removal, Inc. (GGTR) applied for and obtained permits for the tank removal activities from the City of Oakland Fire Department (OFD) and City of Oakland Planning and Building (OPB). Copies of these documents are included as an attachment.

On February 12, 2013, GGTR mobilized its equipment and began work on the project. The concrete sidewalk covering the tank was removed and disposed of at a local recycler. The overburden soil covering the tank was removed and stockpiled on visqueen sheeting adjacent to the tank excavation. Field measurements indicated that the bottom of the tank was 8 feet below grade (fbg). GGTR placed wooden shoring in the excavation in direct accordance with the attached shoring calculations provided by John Carver Engineering Consulting. The subsurface product piping extending between the top of the tank and the foundation of the exterior building structure were cut at each end, drained of any residual product and removed from the excavation area. Exposed product lines were cut and plugged.

As part of the removal operations, GGTR, on February 14, 2013, contracted Icon Environmental Services Inc. (ICON) to pump the residual product from the tank and piping into a tanker truck. GGTR then washed the interior of the tank with a 180-degree water under 3,000-psi pressure. A non-toxic enzyme was used to break down thick oil deposits. After a third washing, ICON removed the wash and rinse water from the tank and transported the Non- RCRA Hazardous Waste Liquid (350 Gallons) under Uniform Hazardous Waste Manifest No. 007269571JJK to the D/K Dixon facility in Dixon California. A copy of the liquid manifest is included as an attachment.

GGTR collected a sample of the rinsate water from the tank and submitted it to Accutest Laboratories (State Certification #08258CA) under a formal Chain-of-Custody protocol. The rinsate sample was analyzed for Total Petroleum Hydrocarbons (TPH) Extractable (C10-C28) by Method SW846 8015B M SW846 3510C. The attached Table provided by Accutest Laboratories presents a summary of the rinsate sample analytical results. A copy of the laboratory certificate of analysis and chain of custody form is included as an attachment.

On February 14, 2013, OFD Inspector Sheryl Skillern tested the lower explosive limit (LEL) and oxygen (O_2) levels in the tank with a Cannonball 3 combustible gas meter. The LEL and O_2 levels were 0% and 20.9%, respectively.

On February 19, 2013, as directed by Sheryl Skillern of the OFD, GGTR removed the tank from the excavation. After a visual inspection, the tank was loaded into a truck and transported as scrap metal to Circosta Iron & Metal, Inc. in San Francisco, California. Copies of the Certificate of Disposal and Circosta Scrap Metal Recycling Receipt are attached. Figure 3 depicts photographs of the tank removal activities.

4. TANK AND SOIL CONDITION

The tank was found to be in poor condition with at least one visible hole. Soil discoloration and hydrocarbon odors were observed in the stockpiled overburden or soil underlying the tank. Soil observed during the UST removal was predominantly a silty clay w/ sand. No groundwater was observed in the excavation during tank removal activities. Because of holes in the tank and soil contamination, an Underground Storage Tank Unauthorized Release (Leak) / Contamination Site Report was required by the OFD. A copy of this report is included as an attachment.

5. TANK SAMPLING

On February 19, 2013, under the direction of Sheryl Skillern of the OFD, GGTR collected one four-point composite soil samples from the stockpiled overburden and one discrete soil sample from the former tank excavation. The composite sample was labeled 9325 SP-COMP(A-D) and the discrete sample was labeled 9325 C-10. Soil sample 9325 C-10 was collected 2 feet below the center of the tank bottom at approximately 10 fbg. All samples were transported to Accutest Laboratories (State Certification #08258CA) under the formal chain-of-custody protocol for the required analyses. Figure 2 depicts the approximate soil sample locations.

6. TANK SAMPLE ANALYSIS

All soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) as C10-C28 (TPH (C10-C28)) by EPA Method SW846 8015B M, and Benzene, Toluene, Ethyl Benzene, Total Xylenes (BTEX) and Methyl Tert Butyl Ether (MTBE) by EPA Method SW846 8260B. Additionally, the soil samples were analyzed for Total Lead by EPA Method SW846 6010B.

A summary of the analytical results is included in the Table provided by Accutest Northern California, Inc. and a copy of the laboratory certificate of analysis and chain of custody form is included as an attachment.

7. OVER-EXCAVATION & CONFIRMATION SAMPLING

Based on the elevated concentration of TPH as diesel reported in the discrete soil sample collected beneath the UST, GGTR, on March 27, 2013, revisited the site to perform over-excavation and confirmation sampling activities. Using a mechanical backhoe, GGTR over-excavated to 16 fbg (limit of backhoe bucket) and removed approximately 7.85 tons of residual hydrocarbon-impacted soil from the UST cavity. The impacted soil was temporarily stockpiled on visqueen sheeting in the parking lane of Brooklyn Avenue.

On March 27, 2013, under direction of inspector Sheryl Skillern of the OFD, GGTR collected two discrete soil samples from the excavation bottom. Soil sample 9325-EX-W-16 was collected from the west end of the excavation at approximately 16 fbg and 9325-EX-E-16 was collected from the east end of the excavation at approximately 16 fbg.

The samples were analyzed for TPH as diesel (C10-C28) by EPA Method SW846 8015B M, BTEX, and MTBE, 1,2-Dibromoethane, 1,2-Dichloroethane, Di-Isopropyl ether, Ethyl tert-Butyl Ether, Tert-Amyl Methyl Ether and Tert Butyl Alcohol by EPA Method SW846 8260B. A

summary of the analytical results is included in the Table provided by Accutest Northern California, Inc. and a copy of the laboratory certificate of analysis and chain of custody form is included as an attachment.

8. WASTE MANAGEMENT & SOIL DISPOSAL

Following waste profiling and facility acceptance, GGTR, on March 27, 203, transported the Non-Hazardous Solid Waste (7.85tons) under Non-Hazardous Waste Manifest No. 3850133350 to Vasco Road Landfill Facility in Livermore, CA. Copies of the solid waste manifest and associated weight tag are included as an attachment.

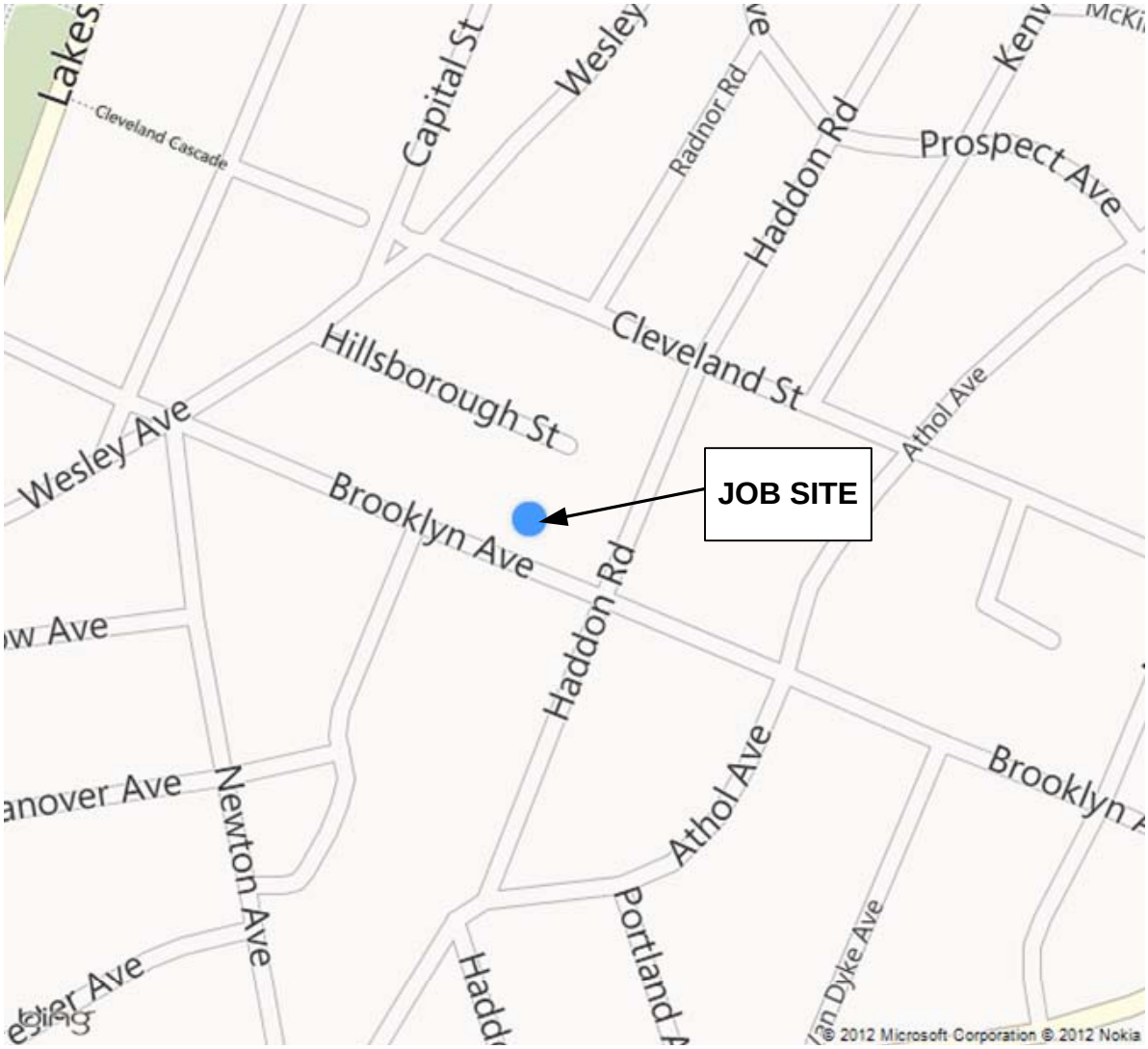
9. SITE RESTORATION

On March 28, 2013, GGTR returned to the site to backfill the excavation with the stockpiled overburden soil and approximately 10 yards of clean import material. The soil was placed in 12" lifts and compacted using a jumping jack compactor. The sidewalk was subsequently replaced in conformance with OPB requirements.

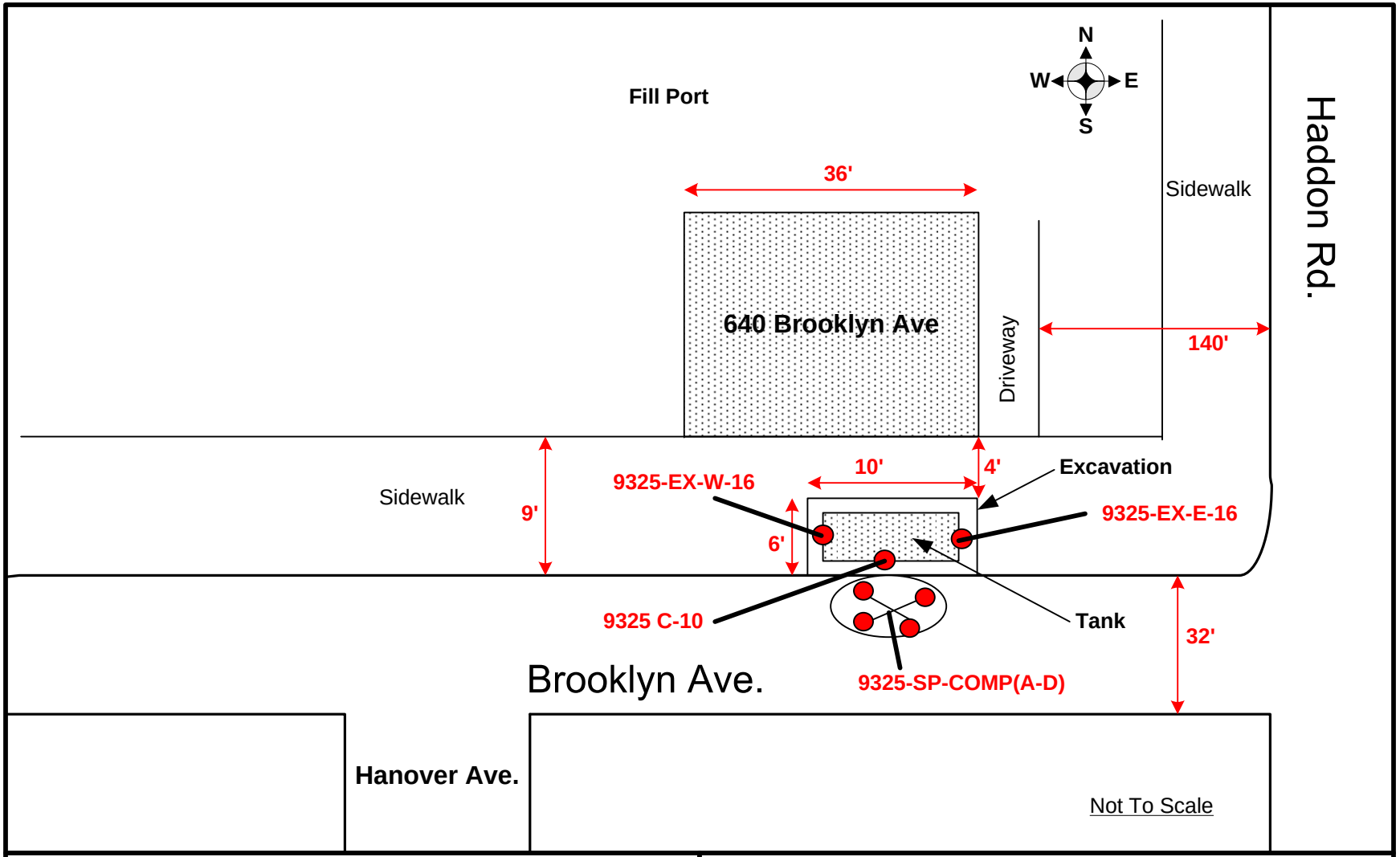
10. FINDINGS / RECOMMENDATION

There were visible holes in the tank. There was visually contaminated soil directly beneath the tank. As well, lab analysis reported high concentrations of TPH(C10-C28) in the tank bottom sample (9325 C-10). Based on field observations and sample analysis, GGTR proposed to over-excavate the impacted material and collect a confirmation sample. Following OFD approval, the impacted soil was removed, properly profiled and transported for disposal to Vasco Road Landfill Facility in Livermore, CA. The TPH concentration measured in the additional confirmation soil samples collected from the excavation bottom exceeded the applicable environmental screening level for TPH. Any further action at the site, if warranted, will be at the direction of the Alameda County Environmental Health Local Oversight Program (ACEH-LOP).

FIGURES



GOLDEN GATE TANK REMOVAL, INC. 1455 Yosemite Avenue San Francisco, CA 94124 Ph (415) 512-1555 Fx (415) 512-0964		**VICINITY MAP** 640 Brooklyn Avenue Oakland, CA 94606	
GGTR Project No.9325	*Drawing By: AC*	November 2012	***Figure 1***



GOLDEN GATE TANK REMOVAL, INC.
1455 Yosemite Avenue
San Francisco, California 94124
Phone (415) 512-1555 Fax (415) 512-0964

Site Drawing
640 Brooklyn Avenue
Oakland, California 94606

GGTR Proj. No. 9325	*Figure By:AC*	*April 2013*	***Figure 2***

UST READY TO BE REMOVED FROM EXCAVATION

TANK READY TO BE TRANSPORTED FOR DISPOSAL

GOLDEN GATE TANK REMOVAL, INC. 1455 Yosemite Avenue San Francisco, CA 94124 Ph (415) 512-1555 Fx (415) 512-0964		**UST REMOVAL** 640 Brooklyn Avenue Oakland, CA 94606	
GGTR Project No. 9325	*Drawing By: AC*	March 2013	***Figure 3***

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TABLE

Accutest Northern California,Inc.		Apr 01, 2013 08:19 am	
Job Number:	C26897		
Account:	Golden Gate Tank Removal		
Project:	640 Brooklyn Ave., Oakland, Ca.		
Project Number:	9325		
		Legend:	Hit
Client Sample ID:		9325-EX-E-16	9325-EX-W-16
Lab Sample ID:		C26897-2	C26897-1
Date Sampled:		03/27/2013	03/27/2013
Matrix:		Soil	Soil
GC/MS Volatiles (SW846 8260B)			
Benzene	ug/kg	ND (2.3)	ND (2.0)
Toluene	ug/kg	ND (2.3)	ND (2.0)
Ethylbenzene	ug/kg	ND (2.3)	ND (2.0)
Xylene (total)	ug/kg	ND (4.6)	ND (4.1)
1,2-Dibromoethane	ug/kg	ND (2.3)	ND (2.0)
1,2-Dichloroethane	ug/kg	ND (2.3)	ND (2.0)
Di-Isopropyl ether	ug/kg	ND (2.3)	ND (2.0)
Ethyl tert-Butyl Ether	ug/kg	ND (2.3)	ND (2.0)
Methyl Tert Butyl Ether	ug/kg	ND (4.6)	ND (4.1)
Tert-Amyl Methyl Ether	ug/kg	ND (2.3)	ND (2.0)
Tert Butyl Alcohol	ug/kg	ND (46)	ND (41)
GC Semi-volatiles (SW846 8015B M)			
TPH (C10-C28)	mg/kg	227	875

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Accutest Northern California,Inc.		Feb 25, 2013 21:20 pm	
Job Number:	**C26300**		
Account:	**Golden Gate Tank Removal**		
Project:	**640 Brooklyn Ave., Oakland, Ca.**		
Project Number:	**9325**		
		Legend:	Hit
Client Sample ID:		**9325-R3**	
Lab Sample ID:		**C26300-1**	
Date Sampled:		**02/14/2013**	
Matrix:		**Water**	
GC Semi-volatiles (SW846 8015B M)			
TPH (C10-C28)	mg/l	ND (0.024)	
Client Sample ID:		**9325 C-10**	**9325 SP-COMP(A-D)**
Lab Sample ID:		**C26300-7**	**C26300-6**
Date Sampled:		**02/19/2013**	**02/19/2013**
Matrix:		**Soil**	**Soil**
GC/MS Volatiles (SW846 8260B)			
Benzene	ug/kg	ND (23)	ND (0.47)
Toluene	ug/kg	ND (23)	ND (0.47)
Ethylbenzene	ug/kg	ND (23)	ND (0.47)
Xylene (total)	ug/kg	127 J	ND (0.94)
Methyl Tert Butyl Ether	ug/kg	ND (47)	ND (0.94)
GC Semi-volatiles (SW846 8015B M)			
TPH (C10-C28)	mg/kg	4820	13.1
Metals Analysis			
Lead	mg/kg	-	48.0

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ATTACHMENTS

ANALYTICAL REPORT
UST CLOSURE INSPECTION RECORDS
CERTIFICATE OF TANK DISPOSAL
SCRAP METAL RECYCLING RECEIPT
LIQUID WASTE MANIFEST
SOLID WASTE MANIFEST & WEIGHT TAG
UST UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION REPORT
PERMITS
SHORING CALCULATIONS

Northern California ACCUTEST LABORATORIES

03/04/13

Technical Report for

Golden Gate Tank Removal

640 Brooklyn Ave., Oakland, Ca.

9325

Accutest Job Number: C26300

Sampling Dates: 02/14/13 - 02/19/13

Report to:

Golden Gate Tank Removal
1455 Yosemite Avenue
San Francisco, CA 94124
Data@ggtr.com; b.wheeler@ggtr.com;
annettechen@ggtr.com; tim@ggtr.com
ATTN: Tim Hallen

Total number of pages in report: **36**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Diane Theesen 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

Sections: 1 2 3 4 5 6 7

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Accutest Laboratories

Sample Summary

Golden Gate Tank Removal

Job No: C26300

640 Brooklyn Ave., Oakland, Ca.
Project No: 9325

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
C26300-1	02/14/13	14:00	TH	02/20/13	AQ	Water	9325-R3
C26300-2	02/19/13	14:00	TH	02/20/13	SO	Soil	9325 SP-(A)
C26300-3	02/19/13	14:00	TH	02/20/13	SO	Soil	9325 SP-(B)
C26300-4	02/19/13	14:00	TH	02/20/13	SO	Soil	9325 SP-(C)
C26300-5	02/19/13	14:00	TH	02/20/13	SO	Soil	9325 SP-(D)
C26300-6	02/19/13	14:00	TH	02/20/13	SO	Soil	9325 SP-COMP(A-D)
C26300-7	02/19/13	14:00	TH	02/20/13	SO	Soil	9325 C-10
C26300-7A	02/19/13	14:00	TH	02/20/13	SO	Soil	9325 C-10

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C26300
Account: Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.
Collected: 02/14/13 thru 02/19/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C26300-1	**9325-R3**					
No hits reported in this sample.						
C26300-6	**9325 SP-COMP(A-D)**					
TPH (C10-C28)		13.1	9.8	2.5	mg/kg	SW846 8015B M
Lead		48.0	1.6		mg/kg	SW846 6010B
C26300-7	**9325 C-10**					
Xylene (total) [a]		127 J	470	47	ug/kg	SW846 8260B
TPH (C10-C28)		4820	390	99	mg/kg	SW846 8015B M
C26300-7A	**9325 C-10**					
Lead		7.1	1.7		mg/kg	SW846 6010B

(a) Dilution required due to high concentration of non-target hydrocarbons.

Northern California ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	9325-R3		
Lab Sample ID:	C26300-1	**Date Sampled:**	02/14/13
Matrix:	AQ - Water	**Date Received:**	02/20/13
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	640 Brooklyn Ave., Oakland, Ca.		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300810.D	1	02/20/13	JH	02/20/13	OP7525	GHH921
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.094	0.024	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	78%		32-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9325 SP-COMP(A-D)		
Lab Sample ID:	C26300-6	**Date Sampled:**	02/19/13
Matrix:	SO - Soil	**Date Received:**	02/20/13
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	640 Brooklyn Ave., Oakland, Ca.		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L23003.D	1	02/21/13	TN	n/a	n/a	VL728
Run #2							

	Initial Weight
Run #1	5.32 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.7	0.47	ug/kg	
108-88-3	Toluene	ND	4.7	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	9.4	0.94	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.7	0.94	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9325 SP-COMP(A-D)		
Lab Sample ID:	C26300-6	**Date Sampled:**	02/19/13
Matrix:	SO - Soil	**Date Received:**	02/20/13
Method:	SW846 8015B M SW846 3545A	**Percent Solids:**	n/a [a]
Project:	640 Brooklyn Ave., Oakland, Ca.		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300876.D	1	02/21/13	JH	02/20/13	OP7528	GHH922
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	13.1	9.8	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	85%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9325 SP-COMP(A-D)		
Lab Sample ID:	C26300-6	**Date Sampled:**	02/19/13
Matrix:	SO - Soil	**Date Received:**	02/20/13
		Percent Solids:	n/a [a]
Project:	640 Brooklyn Ave., Oakland, Ca.		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	48.0	1.6	mg/kg	1	02/20/13	02/22/13	RS	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA3010
(2) Prep QC Batch: MP5875

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	9325 C-10		
Lab Sample ID:	C26300-7	**Date Sampled:**	02/19/13
Matrix:	SO - Soil	**Date Received:**	02/20/13
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	640 Brooklyn Ave., Oakland, Ca.		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	L23004.D	1	02/21/13	TN	n/a	n/a	VL728
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.35 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	230	23	ug/kg	
108-88-3	Toluene	ND	230	23	ug/kg	
100-41-4	Ethylbenzene	ND	230	23	ug/kg	
1330-20-7	Xylene (total)	127	470	47	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	230	47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

(a) All results reported on a wet weight basis.
(b) Dilution required due to high concentration of non-target hydrocarbons.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9325 C-10		
Lab Sample ID:	C26300-7	**Date Sampled:**	02/19/13
Matrix:	SO - Soil	**Date Received:**	02/20/13
Method:	SW846 8015B M SW846 3545A	**Percent Solids:**	n/a [a]
Project:	640 Brooklyn Ave., Oakland, Ca.		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300865.D	40	02/21/13	JH	02/20/13	OP7528	GHH922
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	4820	390	99	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	98%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9325 C-10		
Lab Sample ID:	C26300-7A	**Date Sampled:**	02/19/13
Matrix:	SO - Soil	**Date Received:**	02/20/13
		Percent Solids:	n/a [a]
Project:	640 Brooklyn Ave., Oakland, Ca.		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	7.1	1.7	mg/kg	1	03/01/13	03/01/13	RS	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA3023
(2) Prep QC Batch: MP5906

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Northern California ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest NC Job #: C C26300

Client / Reporting Information

Company Name: Golden Gate Tank Removal, Inc
Address: 1455 Yosemite Ave
City: San Francisco State: CA Zip: 94124
Project Contact: Tim Hallen
Phone #: 415-512-1555
Samplers's Name:

Project Information

Project Name:
Street: 640 Brooklyn Ave.
City: Oakland State: CA.
Project #: 9325
EMAIL: achen@ggtr.com
Client Purchase Order #:

Requested Analysis: TPH-D (8015), BTEX (8260B), LEAD (6010), MTBE (8260B)

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	TPH-D	BTEX	LEAD	MTBE		LAB USE ONLY
-1	9325-R3	2/14	14:00	TmH	H2O	1 Lt									X					
-2 -3 -4 -5	9325 SP-(A-D)	2/19	2 PM	TmH	Soil	4 BT									X	X	X	X		-6) 4:1 COMPOSITE
~~9325-C-10~~	~~9325-C-10~~	~~2/19~~	~~2PM~~	~~TmH~~	~~Soil~~	~~1 BT~~									~~X~~	~~X~~	~~X~~	~~X~~		
* -7	9325 C-10	2/19	2PM	TmH	Soil	1 BT									X	X		X		

2 DAYS

Matrix Codes: WW- Wastewater; GW- Ground Water; SW- Surface Water; SO- Soil; OI-Oil; WP-Wipe; LIQ - Non-aqueous Liquid; AIR; DW- Drinking Water (Perchlorate Only)

Turnaround Time (Business days) — Approved By:/ Date:

- [ ] 10 Day
- [ ] 5 Day
- [ ] 3 Day (125% markup)
- [ ] 2 Day (150% markup)
- [ ] 1 Day (200% markup)
- [ ] Same Day (300% markup)

4 DAY TAT

RUSH

Emergency T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" - Results only
- [x] Commercial "B" - Results with QC summaries
- [ ] Commerical "B+" - Results, QC, and chromatograms
- [ ] FULT1 - Level 4 data package
- [ ] EDF for Geotracker [ ] EDD Format

Provide EDF Global ID
Provide EDF Logcode:

Comments / Remarks

* 9325 C-10 48 HR TAT (ONLY)
ALL OTHERS = 4 DAY

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1 Tim Hallen	Date Time: 2/20/13 0810	Received By: 1	Relinquished By: 2	Date Time: 2/20/13 1000	Received By: 2 Lee Baum
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Appropriate Bottle / Pres. (Y)/N; Labels match Coc? (Y)/N; Headspace Y/N NA; Separate Receiving Check List used: (Y)/N; On Ice (Y)/N	Cooler Temp. 2.4-1.0 = 1.4 °C

C26300: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C26300 **Client:** GOLDEN GATE TANK REMOVAL **Project:** 640 BROOKLYN AVE., OAKLAND, CA.

Date / Time Received: 2/20/2013 **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (2.4/1.4); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☐		☑	3. COC Present:	☑		☐
2. Custody Seals Intact:	☐		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☐		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:408.588.0200
2105 Lundy Avenue
F: 408.588.0201
San Jose, CA 95131
www/accutest.com

C26300: Chain of Custody
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Northern California ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C26300
Account: GGTRCASF Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL728-MB	L22987.D	1	02/21/13	TN	n/a	n/a	VL728

The QC reported here applies to the following samples: **Method:** SW846 8260B

C26300-6, C26300-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	107%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	96%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C26300
Account: GGTRCASF Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL728-BS	L22984.D	1	02/21/13	TN	n/a	n/a	VL728
VL728-BSD	L22985.D	1	02/21/13	TN	n/a	n/a	VL728

The QC reported here applies to the following samples: **Method:** SW846 8260B

C26300-6, C26300-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40	35.4	89	35.5	89	0	81-119/20
100-41-4	Ethylbenzene	40	36.0	90	36.4	91	1	80-119/21
1634-04-4	Methyl Tert Butyl Ether	40	39.3	98	39.8	100	1	79-127/19
108-88-3	Toluene	40	35.9	90	36.1	90	1	80-117/21
1330-20-7	Xylene (total)	120	102	85	102	85	0	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	111%	111%	70-130%
2037-26-5	Toluene-D8	97%	98%	70-130%
460-00-4	4-Bromofluorobenzene	101%	101%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C26300
Account: GGTRCASF Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C26320-1MS	L23005.D	1	02/21/13	TN	n/a	n/a	VL728
C26320-1MSD	L23006.D	1	02/21/13	TN	n/a	n/a	VL728
C26320-1	L23001.D	1	02/21/13	TN	n/a	n/a	VL728

The QC reported here applies to the following samples: **Method:** SW846 8260B

C26300-6, C26300-7

CAS No.	Compound	C26320-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		37.9	31.8	84	34.8	81	9	81-119/20
100-41-4	Ethylbenzene	ND		37.9	28.0	74* [a]	33.2	77* [a]	17	80-119/21
1634-04-4	Methyl Tert Butyl Ether	ND		37.9	37.4	99	40.7	95	8	79-127/19
108-88-3	Toluene	ND		37.9	29.3	77* [a]	34.2	80	15	80-117/21
1330-20-7	Xylene (total)	ND		114	78.1	69* [a]	92.1	72* [a]	16	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C26320-1	Limits
1868-53-7	Dibromofluoromethane	111%	110%	110%	70-130%
2037-26-5	Toluene-D8	96%	99%	100%	70-130%
460-00-4	4-Bromofluorobenzene	102%	102%	98%	70-130%

(a) Outside control limits.

* = Outside of Control Limits.

Northern California ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C26300
Account: GGTRCASF Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7525-MB	HH300797.D	1	02/20/13	JH	02/20/13	OP7525	GHH921

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C26300-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	

CAS No.	Surrogate Recoveries		Limits
630-01-3	Hexacosane	73%	32-124%

Method Blank Summary

Job Number: C26300
Account: GGTRCASF Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7528-MB	HH300803.D	1	02/20/13	JH	02/20/13	OP7528	GHH921

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C26300-6, C26300-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
630-01-3	Hexacosane	89%	37-122%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C26300
Account: GGTRCASF Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7525-BS	HH300798.D	1	02/20/13	JH	02/20/13	OP7525	GHH921
OP7525-BSD	HH300799.D	1	02/20/13	JH	02/20/13	OP7525	GHH921

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C26300-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.772	77	0.725	73	6	38-115/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	84%	80%	32-124%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C26300
Account: GGTRCASF Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7528-BS	HH300804.D	1	02/20/13	JH	02/20/13	OP7528	GHH921
OP7528-BSD	HH300805.D	1	02/20/13	JH	02/20/13	OP7528	GHH921

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C26300-6, C26300-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	74.8	75	75.6	76	1	39-102/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	78%	78%	37-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C26300
Account: GGTRCASF Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7528-MS	HH300868.D	50	02/21/13	JH	02/20/13	OP7528	GHH922
OP7528-MSD	HH300879.D	50	02/21/13	JH	02/20/13	OP7528	GHH922
C26300-7	HH300865.D	40	02/21/13	JH	02/20/13	OP7528	GHH922

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C26300-6, C26300-7

CAS No.	Compound	C26300-7 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	4820		98.7	4170	-658* [a]	4700	-122* [a]	12	39-102/29

CAS No.	Surrogate Recoveries	MS	MSD	C26300-7	Limits
630-01-3	Hexacosane	95%	85%	98%	37-122%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Northern California ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5875
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 02/20/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015		
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054		
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	0.76	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024		
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098		

Associated samples MP5875: C26300-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5875 Methods: SW846 6010B
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/20/13

Metal	C26310-1 Original	MS	Spikelot MPIR4A	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium	anr				
Beryllium					
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt					
Copper					
Iron					
Lead	101	112	44.6	24.6N(a)	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel	anr				
Potassium					
Selenium					
Silicon					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc	anr				

Associated samples MP5875: C26300-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5875 Methods: SW846 6010B
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/20/13

Metal	C26310-1 Original	MSD	Spikelot MPIR4A	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium						
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	101	124	45	51.1N(a)	10.2	20
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Potassium						
Selenium						
Silicon						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	anr					

Associated samples MP5875: C26300-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5875
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 02/20/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	48.6	50	97.2	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP5875: C26300-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5875 Methods: SW846 6010B
Matrix Type: SOLID Units: ug/l

Prep Date: 02/20/13

Metal	C26310-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	1100	1140	2.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP5875: C26300-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5906
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 03/01/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015		
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054		
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	0.26	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024		
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098		

Associated samples MP5906: C26300-7A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5906
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 03/01/13

Metal	C26436-1 Original	MS	Spikelot MPIR4	% Rec	QC Limits
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium	anr				
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron					
Lead	4.4	46.4	41.7	100.8	75-125
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	anr				

Associated samples MP5906: C26300-7A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5906 Methods: SW846 6010B
Matrix Type: SOLID Units: mg/kg

Prep Date: 03/01/13

Metal	C26436-1 Original	MSD	Spikelot MPIR4	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron						
Lead	4.4	47.9	42	103.5	3.2	20
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP5906: C26300-7A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5906
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 03/01/13

Metal	BSP Result	Spikelot MPIR4	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	54.3	50	108.6	80-120
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP5906: C26300-7A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C26300
Account: GGTRCASF - Golden Gate Tank Removal
Project: 640 Brooklyn Ave., Oakland, Ca.

QC Batch ID: MP5906 Methods: SW846 6010B
Matrix Type: SOLID Units: ug/l

Prep Date: 03/01/13

Metal	C26436-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	51.5	66.5	29.1*(a)	0-10
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP5906: C26300-7A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.

OAKLAND FIRE DEPARTMENT, OES
UNDERGROUND STORAGE TANK CLOSURE/REMOVAL FIELD INSPECTION REPORT

Site Address: 640 Broadway	Name of Facility: Casa Amigos Apts.
Inspector: S. Skillern	Contact on site: Bart Wheeler
Date and Time of Arrival: 3-27-13 2:00 pm	Contractor/Consultant: Golden Gate Tank Removal

General Requirements	Yes	No	N/A
Approved closure plan on site.			
Changes to approved plan noted.			
Residuals properly stored/transported.			
Receipt for adequate dry ice noted.			

General Requirements	Yes	No	N/A
Site Safety Plan properly signed.			
40B:C fire extinguisher on site.			
"No Smoking" signs posted.			
Gas detector challenged by inspector.			

Tank Observations	T #1	T #2	T #3	T #4
Tank Capacity (gallons)				
Material last stored				
Dry ice used (pounds)				
Combustible gas concentration as %LEL. *(Note time & sampling point)*				
(1)				
(2)				
(3)				
Oxygen concentration as % volume. *(Note time &sampling point.)*				
(1)				
(2)				
(3)				
Tank Material				
Wrapping/Coating, if any				
Obvious holes?				

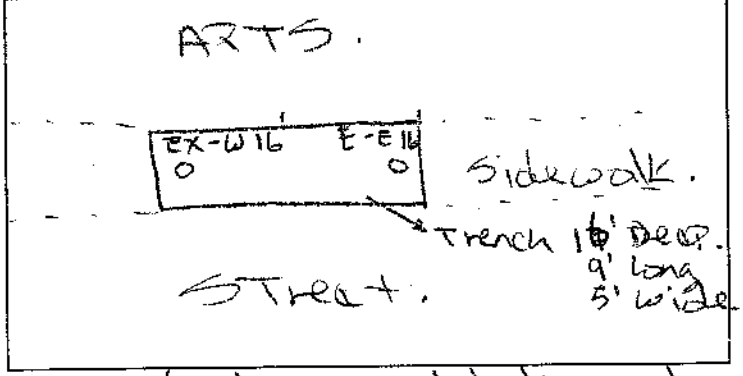
Tank Observations	T #1	T #2	T #3	T #4
Obvious corrosion?				
Obvious odors from tank?				
Seams intact?				
Tank bed backfill material				
Obvious discoloration?				
Obvious odors ex tank bed?				
Water in excavation?				
Sheen/product on water?				
Tank tagged by transporter?				
Tank wrapped for transport?				
Tank plugged w/ vent cap?				
Date/time tank hauled off?				
No. of soil samples taken?				
Depth of soil samples (ft. bgs)				

Piping Removal	Yes	No	N/A
All piping removed hauled off w/ tanks?			
Obvious holes on pipes?			
Obvious odors from pipes?			
Obvious soil discoloration in piping trench?			
Obvious odors from piping trench?			
Water in piping trench?			
Number & depth of soil samples from piping trench?			
Number & depth of water samples from piping trench?			

General Observations	Yes	No	N/A
Leak from any tank suspected?			
"Leak Report" form given to the operator?			
Obviously contaminated soil excavated?			
Soil stockpile sampled?			
Stockpile lined AND covered?			
Water in excavation sampled?			
Number/depth of water samples taken?			
All samples properly preserved for transport?			

Additional Observations	Yes	No	N/A
Soil/water sampling protocols acceptable?	✓		
Sampling "chain of custody" noted?	✓		
Tank pit filled in or covered?			
Tank pit fenced or barricaded?	✓		
Transporter a registered HW hauler?			
Uniform HW Manifest completed?			
Contractor/Consultant reminded of complete UST Removal Report due within 30 days?			
Date/Time removal/closure operations completed?			
OT hours or additional charges due from contractor?			

SITE & SAMPLING DIAGRAM



Notes/Comments: Contractor excavated an additional 10' attempting to reach native soil. Post samples (2) were taken at 17' at both ends of trench.

OAKLAND FIRE DEPARTMENT, OES
UNDERGROUND STORAGE TANK CLOSURE/REMOVAL FIELD INSPECTION REPORT

Site Address: 640 Brooklyn	Name of Facility: Casa Amiga Apts.
Inspector: S. Skillern	Contact on site: Tim
Date and Time of Arrival: 02-19-13 1:30 pm	Contractor/Consultant: Golden Gate Tank Removal

General Requirements	Yes	No	N/A
Approved closure plan on site.	✓		
Changes to approved plan noted.	✓*		
Residuals properly stored/transported.	✓		
Receipt for adequate dry ice noted.			✓

General Requirements	Yes	No	N/A
Site Safety Plan properly signed.	✓		
40B:C fire extinguisher on site.	✓		
"No Smoking" signs posted.	✓		
Gas detector challenged by inspector.		✓	

Tank Observations	T #1	T #2	T #3	T #4
Tank Capacity (gallons)	7506			
Material last stored	Diesel			
Dry ice used (pounds)				
Combustible gas concentration as %LEL. *(Note time & sampling point)*				
(1)				
(2)				
(3)				
Oxygen concentration as % volume. *(Note time &sampling point.)*				
(1)				
(2)				
(3)				
Tank Material SW	Steel			
Wrapping/Coating, if any				
Obvious holes?	✓			

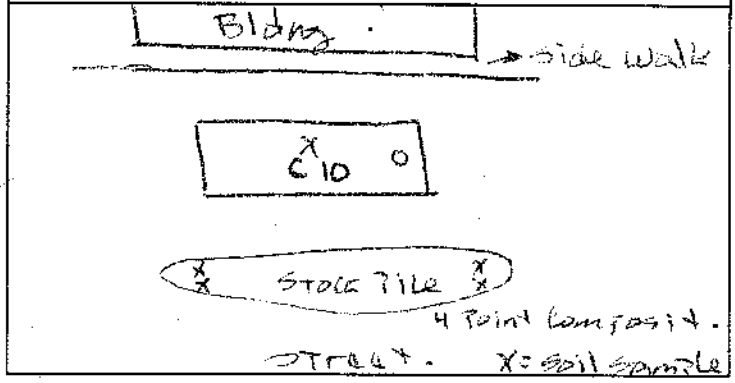
Tank Observations	T #1	T #2	T #3	T #4
Obvious corrosion?	✓			
Obvious odors from tank?	NO			
Seams intact?	NO			
Tank bed backfill material	Dirt			
Obvious discoloration?	✓			
Obvious odors ex tank bed?	Yes			
Water in excavation?	NO			
Sheen/product on water?	N/A			
Tank tagged by transporter?	N/A			
Tank wrapped for transport?	N/A			
Tank plugged w/ vent cap?	N/A			
Date/time tank hauled off?	2/19/13 2 pm			
No. of soil samples taken?	1			
Depth of soil samples (ft. bgs)	10 Feet			

Piping Removal	Yes	No	N/A
All piping removed hauled off w/ tanks?	✓		
Obvious holes on pipes?			
Obvious odors from pipes?			
Obvious soil discoloration in piping trench?			
Obvious odors from piping trench?			
Water in piping trench?			
Number & depth of soil samples from piping trench?			
Number & depth of water samples from piping trench?			

General Observations	Yes	No	N/A
Leak from any tank suspected?	✓		
"Leak Report" form given to the operator?		✓	
Obviously contaminated soil excavated?		✓	
Soil stockpile sampled?		✓	
Stockpile lined AND covered?	✓		
Water in excavation sampled?		✓	
Number/depth of water samples taken?	N/A		
All samples properly preserved for transport?	✓		

Additional Observations	Yes	No	N/A
Soil/water sampling protocols acceptable?	✓		
Sampling "chain of custody" noted?	✓		
Tank pit filled in or covered?	✓	N/S	
Tank pit fenced or barricaded?	✓		
Transporter a registered HW hauler?			✓
Uniform HW Manifest completed?			✓
Contractor/Consultant reminded of complete UST Removal Report due within 30 days?	✓		
Date/Time removal/closure operations completed?		2/19	
OT hours or additional charges due from contractor?			

SITE & SAMPLING DIAGRAM



Notes/Comments:

* Tank contained diesel instead of heating oil
** Will be provided by contractor

OAKLAND FIRE DEPARTMENT, OES
UNDERGROUND STORAGE TANK CLOSURE/REMOVAL FIELD INSPECTION REPORT

Site Address: 640 Brooklyn	Name of Facility: CASA AMIGA ARTS.
Inspector: S. Gilliard	Contact on site: ADAN RODRIGUEZ.
Date and Time of Arrival: 1:05 PM	Contractor/Consultant: Golden Gate Tank Removal.

General Requirements	Yes	No	N/A
Approved closure plan on site.	✓		
Changes to approved plan noted.	✓		
Residuals properly stored/transported.			
Receipt for adequate dry ice noted.			✓

General Requirements	Yes	No	N/A
Site Safety Plan properly signed.			
40B:C fire extinguisher on site.			
"No Smoking" signs posted.			
Gas detector challenged by inspector.			

Tank Observations	T #1	T #2	T #3	T #4
Tank Capacity (gallons)	750			
Material last stored	Diesel			
Dry ice used (pounds)				
Combustible gas concentration as %LEL. *(Note time & sampling point)*				
(1)	10%			
(2)				
(3)				
Oxygen concentration as % volume. *(Note time &sampling point.)*				
(1)				
(2)				
(3)				
Tank Material	Steel			
Wrapping/Coating, if any				
Obvious holes?	✓			

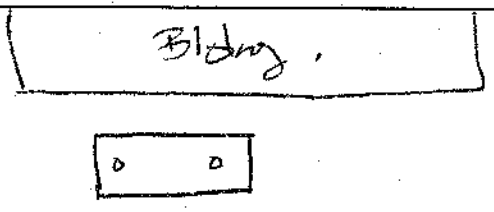
Tank Observations	T #1	T #2	T #3	T #4
Obvious corrosion?				
Obvious odors from tank?				
Seams intact?				
Tank bed backfill material				
Obvious discoloration?				
Obvious odors ex tank bed?				
Water in excavation?				
Sheen/product on water?				
Tank tagged by transporter?				
Tank wrapped for transport?				
Tank plugged w/ vent cap?				
Date/time tank hauled off?				
No. of soil samples taken?				
Depth of soil samples (ft. bgs)				

Piping Removal	Yes	No	N/A
All piping removed hauled off w/ tanks?	✓		
Obvious holes on pipes?	✓		
Obvious odors from pipes?		✓	
Obvious soil discoloration in piping trench?			
Obvious odors from piping trench?		✓	
Water in piping trench?		✓	
Number & depth of soil samples from piping trench?			
Number & depth of water samples from piping trench?			

General Observations	Yes	No	N/A
Leak from any tank suspected?			
"Leak Report" form given to the operator?			
Obviously contaminated soil excavated?			
Soil stockpile sampled?			
Stockpile lined AND covered?			
Water in excavation sampled?			
Number/depth of water samples taken?			
All samples properly preserved for transport?			

Additional Observations	Yes	No	N/A
Soil/water sampling protocols acceptable?			
Sampling "chain of custody" noted?			
Tank pit filled in or covered?			
Tank pit fenced or barricaded?			
Transporter a registered HW hauler?			
Uniform HW Manifest completed?			
Contractor/Consultant reminded of complete UST Removal Report due within 30 days?			
Date/Time removal/closure operations completed?			
OT hours or additional charges due from contractor?			

SITE & SAMPLING DIAGRAM



Notes/Comments: Contractor found tank held Diesel fuel instead of heating oil.

CERTIFICATE OF DISPOSAL

DATE:	February 19, 2013
PROJECT NUMBER:	9325
PROJECT ADDRESS:	640 Brooklyn Avenue, Oakland, CA 94606
TANK SIZE:	750 gallons
ORIGINAL TANK CONTENTS:	Diesel

Golden Gate Tank Removal, Inc. hereby issues CERTIFICATION that:

- This tank was cleaned by triple rinsing. The rinsate was sampled and analyzed for Total Petroleum Hydrocarbons and found to be below the City of Oakland limit of 100 parts per million allowable for disposal as scrap metal.
- The Oxygen content of the Tank was 20.9%
- The Lower Explosive Limit was 0%
- The above tank was rendered harmless by cutting and disposed of as scrap metal at Circosta Iron and Metal, Inc.
- The above method of tank destruction is suitable for the materials involved and is accepted by the City of Oakland and County of Alameda as an appropriate disposal method.

Copies of the analytical certificate the chain-of-custody prepared for the rinsate sample and the scrap metal receipt are attached to this Certification. If there are any questions regarding this tank, please contact this office.

Golden Gate Tank Removal, Inc.

1455 Yosemite Avenue • San Francisco, CA 94124 • Tel 415.512.1555 • Fax 415.512.0964

CIRCOSTA IRON AND METAL, INC.

9325 & 9333

1801 EVANS AVENUE • SAN FRANCISCO, CALIFORNIA 94124
PHONE (415) 282-8568 FAX (415) 641-7804

BUY NUMBER
425083

CUSTOMER GOLDEN GATE TANK REMOVAL

ADDRESS

LICENSE NO.

DRIVER'S LIC. NO. 8K69189

JOB NO. NAME

TIME IN 8:50 AM TIME OUT 9:00 AM

DATE: 2-22-13

9860 LBS. GROSS LB

8600 LBS. TARE LB

1260 LBS. NET

LBS. DEDUCTION

#1 HMS	☐		
#2 HMS	☐		
STRUCTURAL	☐	PREPARED	☐
RE-BAR	☐	UNPREPARED	☑
HMS and SHEET MIX	☐		
CLEAN SHEET	☐		
W/G	☐		
CAST IRON	☐		
M-BLOCKS	☐		
BODIES	☐		
NON FERROUS	☐		

PAID
FEB 22 2013
BY:

WEIGHER

UNIT PRICE $ 225 NT

AMOUNT $ 141 75

COMMENTS

X
CUSTOMER SIGNATURE

BILL OF SALE: I hereby state that I am the lawful owner of the material described hereon, that I have a right to sell same and that for payment received in full, hereby acknowledged. I sell and convey title of same of the CIRCOSTA IRON & METAL CO.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAC 002 719 554 | 2. Page 1 of 1 | 3. Emergency Response Phone: 510-476-1740 | 4. Manifest Tracking Number: 007269571 JJK

GENERATOR

5. Generator's Name and Mailing Address: Jeffrey Jung, 109 Shooting Star Isle, Foster City, CA 94404, 650-574-3773

Generator's Site Address (if different than mailing address): 640 Brooklyn Avenue, Oakland, CA 94606-1080

Generator's Phone:

6. Transporter 1 Company Name: ICON Environmental Services Inc. | U.S. EPA ID Number: CAL 000 362 980

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address: U/R Unocal, 7300 Chevron Way, Dixon, CA 95620, 707-693-6008 | U.S. EPA ID Number: CAT 080 012 602

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non RCRA Hazardous Waste Liquid (Oily Water)	001	TT	2350	G	223
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Wear PPE, ERG 152, Emergency Contact: Charles Seaton 510-476-1740.
GGTR#9325

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: ADAN RODRIGUEZ | Signature | Month 12 | Day 14 | Year 13

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Mike Brown Sr | Signature | Month 12 | Day 14 | Year 13

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

REPUBLIC SERVICES, INC.

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is NOT asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
N/A		1

d. Generator's Name and Location:	e. Generator's Mailing Address:
Jeffrey Jung 640 Brooklyn Avenue Oakland, CA 94606 f. Phone:650-574-3773	Jeffrey Jung 109 Shooting Star Isle Foster City, CA 94404 g. Phone:650-574-3773
If owner of the generating facility differs from the generator, provide:	
h. Owner's Name:	i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
3850133350	02/25/14	Soil				CY

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Annette Chen		

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
Golden Gate Tank Removal
1455 Yosemite Ave
San Francisco, CA 94124
b. Phone: 415-512-1555

c. Driver Name (Print)	d. Signature	e. Date
Julian Maldonado	Julian Maldonado	501-5J2940 3-27-13

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Vasco Road Landfill 4001 N. Vasco Rd. Livermore, CA 94551 b. Phone: 925-447-0491		

I herby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
M Pedroza		3-27-13

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES
VASCO ROAD LANDFILL, LLC
4001 N. Vasco Road, Livermore, CA 94551
(925) 447-0491

54780

021570
GOLDEN GATE TANK REMOVAL INC
1455 YOSEMITE AVE
SAN FRANCISCO, CA 94124

Contract: 3650133350

SITE	TICKET	GRID
01	232896	0000

DEPUTY WEIGHMASTER: M PEDROZA

DATE IN	TIME IN
27 March 2013	2:27 pm

DATE OUT	TIME OUT
27 March 2013	2:42 pm

VEHICLE	
GOL501	

REFERENCE	ORIGIN
	OAKLAND

00 Gross Weight 36,900.00 lb
Tare Weight 21,200.00 lb
Net Weight 15,700.00 lb 7.85 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
7.85	TN	SW-CONT SOIL-ALT DAILY COVER				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.
All children must remain in vehicles.
Absolutely no salvaging allowed.

WEIGHMASTER CERTIFICATE
THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

AMOUNT
TENDERED
CHANGE

Driver: _____
CUSTOMER

Deputy Weighmaster: _____

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK)/ CONTAMINATION SITE REPORT

EMERGENCY ☐ Yes ☒ No

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ Yes ☐ No

REPORT DATE: 3/19/13

CASE #:

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PERSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE.

SIGNED _____ DATE _____

REPORTED BY

NAME OF INDIVIDUAL FILING REPORT: Annette Chen

PHONE: (415) 512-1555

SIGNATURE:

REPRESENTING
☐ LOCAL AGENCY ☐ REGIONAL BOARD
☐ OWNER/OPERATOR ☒ OTHER... contractor

COMPANY OR AGENCY NAME: Golden Gate Tank Removal, Inc.

ADDRESS: 1455 Yosemite Ave. (STREET) San Francisco (CITY) CA (STATE) 94124 (ZIP)

RESPONSIBLE PARTY

NAME: Jeffrey Jung ☐ Unknown

PHONE: 650-574-3773

ADDRESS: 109 Shooting Star Isle (STREET) Foster City (CITY) CA (STATE) 94404 (ZIP)

SITE LOCATION

FACILITY NAME (IF APPLICABLE): 640 Brooklyn Ave.

OPERATOR:

PHONE:

ADDRESS: 640 Brooklyn Ave. (STREET) Oakland (CITY) Alameda (COUNTY) 94606 (ZIP)

CROSS STREET: Haddon Rd

IMPLEMENTING AGENCIES

LOCAL AGENCY: City of Oakland Fire Department

AGENCY NAME: -Sheryl Skillern

PHONE: (510)238-7253

REGIONAL BOARD:

PHONE:

SUBSTANCES INVOLVED

(1) NAME: Diesel — QUANTITY LOST (GALLONS): _____ ☒ Unknown

(2) _____ ☐ Unknown

DISCOVERY/ABATEMENT

DATE DISCOVERED: 2/19/13

HOW DISCOVERED: ☐ Tank Test ☒ Tank Removal ☐ Nuisance Conditions ☐ Inventory Control ☐ Subsurface Monitoring ☐ Other...

DATE DISCHARGE BEGAN: ☒ Unknown

HAS DISCHARGE BEEN STOPPED? ☒ Yes ☐ No 2/19/13 (IF YES, DATE)

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☒ Remove Contents ☒ Close Tank & Removed
☐ Repair Tank ☐ Change Procedure
☐ Replace Tank ☐ Other...
☐ Repair Piping

SOURCE/ CAUSE

SOURCE OF DISCHARGE: ☐ Tank Leak ☐ Piping Leak ☒ Unknown ☐ Other...

CAUSE(S): ☐ Overfill ☐ Corrosion ☐ Rupture/Failure ☒ Unknown ☐ Spill ☐ Other...

CASE TYPE

CHECK ONE ONLY
☒ Undetermined ☐ Soil Only ☐ Groundwater ☐ Drinking Water - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS

CHECK ONE ONLY
☒ No Action Taken
☐ Leak Being Confirmed
☐ Remediation Plan
☐ Preliminary Site Assessment Workplan Submitted
☐ Preliminary Site Assessment Underway
☐ Case Closed (Cleanup Completed or Unnecessary)
☐ Pollution Characterization
☐ Post Cleanup Monitoring in Progress
☐ Cleanup Underway

REMEDIAL ACTION

CHECK APPROPRIATE ACTION(S)
☐ Cap Site (CD)
☐ Contamination Barrier (CB)
☐ Vacuum Extract (VE)
☒ Excavate & Dispose (ED)
☐ Excavate & Treat (ET)
☐ No Action Required (NA)
☐ Remove Free Product (FP)
☐ Pump & Treat Groundwater (GT)
☐ Treatment at Hookup (HU)
☐ Enhanced Bio Degradation (IT)
☐ Replace Supply (RS)
☐ Vent Soil (VS)
☐ Other...

COMMENTS

Significant soil contamination was visible. Holes found in the tank.

UNIFIED PROGRAM CONSOLIDATED FORM
HAZARDOUS WASTE
HAZARDOUS WASTE TANK CLOSURE CERTIFICATION

I. FACILITY IDENTIFICATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3.
640 Brooklyn Avenue

FACILITY ID# 1.

TANK OWNER NAME 740.
Jeffrey Jung

TANK OWNER ADDRESS 741.
109 Shooting Star Isle

TANK OWNER CITY: Foster City 742. | STATE: CA 743. | ZIP CODE: 94404 744.

II. TANK CLOSURE INFORMATION

TANK INTERIOR ATMOSPHERE READINGS	Tank ID # (Attach additional copies of this page for more than three tanks)	Concentration of Flammable Vapor: Top	Center	Bottom	Concentration of Oxygen: Top	Center	Bottom
1	745.	0 746a.	0 746b.	0 746c.	20.8 747a.	20.9 747b.	20.9 747c.
2	748.	749a.	749b.	749c.	750a.	750b.	750c.
3	751.	752a.	752b.	752c.	753a.	753b.	753c.

III. CERTIFICATION

On examination of the tank, I certify the tank is visually free from product, sludge, scale (thin, flaky residual of tank contents), rinseate and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF CERTIFIER: Tim Hallen

NAME OF CERTIFIER (Print) 754.
Tim Hallen

TITLE OF CERTIFIER 755.
Project Manager

ADDRESS 756.
1455 Yosemite Avenue

CITY 757.
San Francisco

PHONE 758.
415-512-1555

DATE 759. | CERTIFICATION TIME

STATUS OR AFFILIATION OF CERTIFYING PERSON

Certifier is a representative of the CUPA, authorized agency, or LIA: 760.
☐ Yes ☒ No

Name of CUPA, authorized agency, or LIA: 761.

If certifier is other than CUPA / LIA check appropriate box below: 762.

- ☐ a. Certified Industrial Hygienist (CIH)
- ☐ b. Certified Safety Professional (CSP)
- ☐ c. Certified Marine Chemist (CMC)
- ☐ d. Registered Environmental Health Specialist (REHS)
- ☐ e. Professional Engineer (PE)
- ☐ f. Class II Registered Environmental Assessor
- ☒ g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS 763.
(If yes, the tank interior atmosphere shall be re-checked with a combustible gas indicator prior to work being conducted on the tank.) ☐ Yes ☐ No

CERTIFIER'S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC: 764.
Treat As Clean Scrap metal

A copy of this certificate shall accompany the tank to the recycling/disposal facility and be provided to the agency overseeing tank closure (i.e. CUPA or other authorized local agency); the owner and/or operator of the tank system; and the tank removal contractor.

CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Appl# X1202398 Job Site 640 BROOKLYN AV Parcel# 023 -0410-020-00

Descr Remove UG storage tank in SIDEWALK AREA ONLY. Permit Issued 11/08/12
FIRE MARSHAL review required. 3rd FLOOR.
Call PWA INSPECTION prior to start: 510-238-3651. 4th FLOOR.
Work Type EXCAVATION-PRIVATE P Non-Metered

USA # Util Co. Job # Acctg#:
Util Fund #:

		Applcnt	Phone#	Lic#	--License Classes--
Owner	JUNG JEFFREY S				
Contractor	GOLDEN GATE TANK REMOVAL	X	(415)512-1555	616521 A	C8
Arch/Engr					
Agent					

Applic Addr 1455 YOSEMITE AVENUE, SAN FRANCISCO, CA, 94124

JOB SITE

$436.05 FEES TO BE PAID AT ISSUANCE

$71.00 Applic	$309.00 Permit
$.00 Process	$36.10 Rec Mgmt
$.00 Gen Plan	$.00 Invstg
$.00 Other	$19.95 Tech Enh

Permit Issued By _____ Date: _____

Inspection Routing:

Inits	Date	
		FLD-CHK/Pre-Con
		Excavation/Anchor Installation
		Sidewalk repair mark-out
		Concrete repair
		Finalled

ADDRESS:

DIST:

Date: 11/08/12 Amt Paid: $436.05 Receipt# 171826
By: SWK Register: ROS

CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Permit No. X1202398 Parcel #: 023 -0410-020-00
Project Address: 640 BROOKLYN AV

Licensed Contractors' Declaration
I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Construction Lending Agency Declaration
I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency.

Lender_____ Address_____

Workers' Compensation Declaration

I hereby affirm under penalty of perjury one of the following declarations:

[ ] I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

[ ] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

CARRIER:_____POLICY NO. _____

[ ] I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Hazardous Materials Declaration

I hereby affirm that the intended occupancy [ ] WILL [ ] WILL NOT use, handle or store any hazardous, or acutely hazardous, materials. (Checking "WILL" acknowledges that Sections 25505, 25533, & 25534 of the Health & Safety Code, as well as filing instructions, were made available to you.)

I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection. I am fully authorized by the owner and to perform the work authorized by this permit.

PRINT NAME _____ Signature [ ] Contractor, or [ ] Agent _____ Date

ADDRESS:_____

DIST:_____

Oakland Fire Department, Fire Prevention Bureau
250 Frank H. Ogawa Plaza, Ste. 3341
Oakland, CA 94612-2032

(510) 238-3851
TTY (510) 238-6884

Inspection Work Order

Business Name:	CASA AMIGA APARTMENTS	Reason:	Other
Address:	640 BROOKLYN AVE	Scheduled:	
Job (Insp Ref#):	2012-36123	Assigned To:	Skillern,Sheryl
Comments:	11/8/12 - UST Removal Application. hb		
Invoice #	2012-33736	Applicant:	Golden Gate Tank REmoval
Invoice Amount	795.50	Applicant Ph#:	415-512-1555
		Contractor:	
		Contractor Ph#:	

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY: Sheryl Skillern
TITLE: Senior Haz Mat Insp
DATE: 11/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

Attention: City of Oakland

Underground Tank Removal Application

640 BROOKLYN AVENUE
OAKLAND, CA 94606

November 6, 2012

GOLDEN GATE TANK REMOVAL, INC.
1455 YOSEMITE AVENUE
SAN FRANCISCO, CALIFORNIA 94124

PROJECT # 9325

1455 Yosemite Avenue - San Francisco, CA 94124 - Tel.: 415.512.1555 Fax: 415.512.0964
General Engineering Contractors License No. 616521

City of Oakland, Fire Department, Office of Emergency Services
Hazardous Materials Program
APPLICATION FOR UNDERGROUND TANK REMOVAL

FACILITY

Project Contact & Phone # Tim Hallen (415) 512-1555

Facility Name | **Phone#** 650-574-3773

Address 640 Brooklyn Avenue, Oakland, CA

Cross Street Haddon Rd.

Owner/Operator Jeffrey Jung | **Phone #** 650-574-3773

CONTRACTOR

Contractor Name Golden Gate Tank Removal, Inc. | **Phone #** (415) 512-1555

Contractor Address 1455 Yosemite Ave. | **CA License #** 616521 | **Class** A-Haz, C-8

Hazardous Waste Certified: (Qualifying license category A-Haz, C-8) Yes ☒ No ☐ | **Workers Comp#** 1947693-2011

City of Oakland Business Tax License # 1307584 | **Permit #**

TANKS

Does this site have a leaking UST (or did it have a leaking tank system?) Yes ☐ No ☒

State Tank ID#	Tank Size	Material That Was Stored	Proposed Removal Date
39- 1 (one)	1500 Gallons	Heating Oil	A.S.A.P.
39-			
39-			
39-			
39-			

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY:
TITLE:
DATE:

ALL INSPECTIONS REQUIRE 48 HOURS NOTICE

PLAN

__APPROVED __APPROVED WITH CONDITION(S) __DISAPPROVED

PLAN REVIEWER S SIGNATURE **DATE OF APPROVAL** 11/19/12

*COPY OF ENCROACHMENT PERMIT

APPLICANT MUST PERFORM ALL WORK IN ACCORDANCE WITH CITY OF OAKLAND ORDINANCES, STATE LAWS, AND RULES AND REGULATIONS OF THE CITY OF OAKLAND FIRE SERVICES AGENCY. OWNER OR LICENSED AGENT S SIGNATURE CERTIFIES THE FOLLOWING: I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS INSTALLATION PLAN IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IS SUCH A MANNER AS TO BECOME SUBJECT TO WORKER S COMPENSATION LAWS OF CALIFORNIA. CONTRACTOR S HIRING OR SUBCONTRACTING SIGNATURE CERTIFIES THE FOLLOWING: I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS INSTALLATION PLAN IS ISSUED, I SHALL EMPLOY PERSONS SUBJECT TO WORKER S COMPENSATION LAWS OF CALIFORNIA.

APPLICANT S SIGNATURE **TITLE:** Project Coordinator **DATE:** 11/6/12

...WED AND APPROVED
AND FIRE DEPARTMENT

...ECTIONS REQUIRE
...S NOTICE

CITY OF OAKLAND
FIRE PREVENTION BUREAU
250 Frank Ogawa Plaza, Ste. 3341
OAKLAND, CALIFORNIA 94612-2032
(510) 238-3851

APPLICATION for PERMIT to INSTALL, REMOVE or REPAIR TANKS

In the CITY OF OAKLAND

Request Submittal Date: 11/6/12

PLEASE CIRCLE APPROPRIATE ACTIONS: **Application is hereby made for permit to:**

(a) Remove (circled) **(b) Install (c) Repair (d) Modify (e) Abandon/Close in Place** A

(a) Gasoline (b) Fuel oil (c) Diesel (d) Heating Oil **tank(s) and excavate, commencing:**

(a) four feet inside the curb line* (circled); **(b) inside the property line; (c) aboveground; (d) underground tank(s)** (d circled)

inside curb line, please attach copy of sidewalk/excavation permit from PLANNING AND BUILDING

on the E. **side of** Brooklyn **St./Ave** (Ave circled) ______ **feet** ______ **of** Haddon Rd. **St./Ave.**

Site Address: 640 Brooklyn Ave., Oakland, CA **Present storage** Heating Oil

Owner: Jeffrey Jung **Address** 109 Shooting Star Isle **Phone** 650-574-3773

Foster City CA 94404

Applicant: Golden Gate Tank Removal, Inc. **Address** 1455 Yosemite Ave. **Phone** (415) 512-1555

San Francisco CA 94124

Sidewalk surface to be disturbed X **Number of Tanks** 1 (one) **Capacity** 1500 **Gallons ea.**

Remarks ______________________

Signature [signature]

PLEASE ATTACH/SUBMIT: ***(All applicants must have a City Business License Permit)***

- **(2) Copies of Closure Plans for underground tank removal(s)**
- **(2) Sets of plans and (1) copy of specifications for above ground tank removal**
- **(2) Sets of plans and (2) sets of application packets for underground tank installation/modifications**
- **(2) Sets of plans for aboveground tank installation and specifications**
- **copy or prepare to show Planning and Building approval for aboveground tank removal and tank repair**

NOTE: FOR TANK INSTALLATION PLEASE SUBMIT THIS APPLICATION FORM ALONG WITH A APPLICATION FOR PERMIT TO OPERATE, MAINTAIN OR STORE

FOR OFFICE USE ONLY

Permit No. __________ **Amt. Recv'd** __________ **Date Issued:** __________

Copies to: Electrical Inspection **Ck#** __________ **Cash** __________

Receipt# __________ **Recv'd by:**

rev:05/98

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY: [signature]
TITLE: HM INSP
DATE: 11/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

INDICATE THE RESPONSIBLE PARTY TO BE BILLED FOR ADDITIONAL FSA/OES STAFF TIME EXPENDED BEYOND THE HOURS COVERED BY THE INITIAL DEPOSIT AMOUNT. THE PARTY MUST ACKNOWLEDGE THIS RESPONSIBILITY FOR THE ADDITIONAL BILLING BY SIGNATURE AND DATE BELOW.

NAME Jeffrey Jung

MAILING ADDRESS 109 Shooting Star Isle Foster City CA 94404
STREET **CITY, STATE, ZIP**

DAY PHONE NUMBER 650-574-3773
area code **phone #**

SIGNATURE _____ -agent for the owner

DATE 11/6/12

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY: _____
TITLE: SENIOR HAZ MAT INSP
DATE: 11/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

form c:tankapp.ins. January 2, 1998

CITY OF OAKLAND
Fire Department
Fire Prevention Bureau
Hazardous Materials Program
250 Frank H. Ogawa Plaza, Ste. 3341
Oakland, CA 94612-2032

UNDERGROUND TANK CLOSURE PLAN

(Complete according to instructions)

1) Name of Business 640 Brooklyn Avenue

Business Owner or Contact Person (PRINT) Jeffrey Jung

2) Site Address 640 Brooklyn Avenue

City Oakland Zip 94606 Phone 650-574-3773

3) Mailing Address 109 Shooting Star Isle

City Foster City Zip 94610 Phone 650-574-3773

4) Property Owner Jeffrey Jung

Business Name (if applicable)

Address 109 Shooting Star Isle

City, State Foster City CA Zip 94404

5) Generator name under which tank will be manifested

Jeffrey Jung

EPA ID Under which tank will be manifested CA C-002-710-720

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY:
TITLE: Senior Haz Mat
DATE: 11/16/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

6) Contractor Golden Gate Tank Removal, Inc.

Address 1455 Yosemite Ave.

City San Francisco Phone (415) 512-1555

License Type A-Haz, C-8 IDS 616521

Effective January 1, 1992, Business and Professional Code Section 7058.7 require contractors to also hold Hazardous Waste certification issued by the State Contractor License Board

7) Consultant (if applicable) n/a
Address
City, State Phone

8) Main Contact Person for Investigation (if applicable)

Name Tim Hallen Title Project Manager

Company Golden Gate Tank Removal, Inc.

Phone (415) 512-1555

9) Number of underground tanks being closed with this plan 1 (one) (Confirmed with owner operator)

10) State Registered Hazardous Waste Transporters/Facilities (see instructions)

****Underground storage tanks must be handled as hazardous waste ****

a) Product/Residual Sludge/Rinsate Transporter

Name Icon Environmental Services, Inc EPA I.D. NO. CAL000362980

Hauler License No. License Exp. Date

Address P. O. Box 2407

City Union City State CA Zip 94587

b) Product/Residual Sludge/Rinsate Disposal Site

Name DK Dixon EPA ID No. CAT080012602

Address 7300 Chevron Way

City Dixon State CA Zip 95620

c) Tank and Piping Transporter

Name Golden Gate Tank Removal, Inc. (Dispose & Transport as Non Haz) EPA I.D. No. _____

c) Hauler License No. _____ License Exp. Date _____

Address 1455 Yosemite Ave.

City San Francisco State CA Zip 94124

d) Tank and Piping Disposal Site

Name Circosta Scrap Metal EPA I.D. No. CAD983650797

Address 1801 Evans Ave.

City San Francisco State CA Zip 94124

11) Sample Collector

Name Tim Hallen

Company Golden Gate Tank Removal, Inc.

Address 1455 Yosemite Ave.

City San Francisco State CA Zip 94124

Phone (415) 512-1555

12) Laboratory

Name Accutest Laboratories

Address 2105 Lundy Ave.

City San Jose State CA Zip 95054

State Certification No. 08258

13) Have tanks or pipes leaked in the past Yes ☐ No ☐ Unknown ☒

If yes, describe _____

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY: _____
TITLE: Senior Hazmat
DATE: 11/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

14) **Describe methods to be used for rendering tank (s): inert:**

All existing material in tank will be removed. Tank will ten be triple rinsed to removal residual material. After triple rinsing, the tank will be purged of vapors using dry ice at a ratio of 25lbs per 1, 1000 gallon tank volume. Immediately prior to removal the tank will be tested for LEL and % O2. The LEL must be within 10% of LEL for material previously contained in thank and oxygen should be not exceed 5%.

Before tanks are pumped out and inserted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be permanently plugged.

The Bay Area Air Quality Management District, 415/771-6000 must also be contacted for tank removal permit. The use of a combustible gas indicator to verify tank inertness is required. It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert. Note: you may be required to recalibrate the combustible gas indicator on site, to show that it is working properly.

15) **Tank History and Sampling Information *** (see instructions) *****

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		
1500	unknown	soil, groundwater if present	Sample will be takenat each end of tank at each end of tank at a depth of 2' into native soil and from stockpile. 1. stockpile 2.north/or east end of excavtion 3.south/or west end of excavtion 4. bottom of tank (max of 15feet)

One soil sample must be collected for every 20 linear feet or piping that is removed. A ground water sample must be collected if any ground water is present in the excavation.

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY:
TITLE: Sen. on HAZ MAT
DATE: 11/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

EXCAVATED/STOCKPILED SOIL

Stockpiled Soil volume (estimated)	Sampling Plan
20 yards	4 point composite for every 50 cubic yards or 4 point composite for every 20 cubic yards

Stockpiled soil must be placed on beamed plastic and must be completely covered by plastic sheeting

Will the excavated soil be returned to the excavation immediately after tank removal?

☐ yes ☐ No ☒ unknown

If yes, explain reasoning _____

If unknown at this point in time, please be aware that excavated soil may no be returned to the excavation without prior approval from Fire Services Agency, Office of Emergency Services. This means that the contractor, consultant, or responsible party must communicate with the Hazardous Materials Inspector IN ADVANCE of backfilling operations.

16. Chemical methods and associated detection limits to be used for analyzing samples:

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed.
See attached Table 2.

17. Submit Site Health and Safety Plan (see Instructions)

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
Benzene	8021B	SW8020F	0.005 ppm
Toluene	8021B	SW8020F	0.005 ppm
Ethylbenzene	8021B	SW8020F	0.005 ppm
Xylenes	8021B	SW8020F	0.010 ppm
TPH-D	8015M	CATFH	1.0 ppm

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY: _____
TITLE: SENIOR HAZ MAT
DATE: 11/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

18. Submit Workers Compensation Certificate copy

Name of Insurer State Compensation Insurance Fund

19. Submit Plot Plan ***(Be Instructions)***

20. Enclose Permit fee (See Instructions)

21. Report any leaks or contamination to this office within 5 days of discovery.

The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report, (ULR) form.

22. Submit a closure report to this office within 60 days of the tank removal. The report must contain all information listed in item 22 of the instructions.

23. Submit State (Underground storage Tank Permit Application) Forms A and B (one B form for each UST to be removed) (mark box 8 for tank removed in the upper right hand corner)

I declare that to, the best of my knowledge and belief that the statements and information provided above are correct and true.

I understand that information, in addition to that proved above, may be needed in order to obtain approval from the Hazardous Materials Division and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA. (Occupational Safety and health Administration) requirements concerning; personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his age and that this responsibility is not shared nor assumed by the City of Oakland.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Inspector at least three working days in advance of site-work, to schedule the required inspections.

CONTRACTOR INFORMATION

Name of Business Golden Gate Tank Removal, Inc.

Name of Individual Annette Chen - Project Coordinator

Signature _____ Date 11/6/12

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY: _____
TITLE: SENIOR HAZ MAT
DATE: 11/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business 640 Brooklyn Avenue

Name of Individual Jeffrey Jung

Signature _____ -agent for the owner Date 11/6/12

General Instructions

- Three (3) copies of this plan plus attachments and permit must be submitted to this Department.
- Any cutting into tanks requires Fire Services Agency approval.
- One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.
- State of California Permit Application Forms A and B are to submit to this office One Form A per site, one Form B for each removed tank.

Line Item Specific Instructions

2. SITE ADDRESS
   Address at which closure is taking place.

5. EPA I.D. NO. - under which the tanks will be manifested
   EPA I.D. numbers may be obtained from the State Department of Toxic Substances Control, 916/324-1781

6. CONTRACTOR
   Prime contractor for the project.

10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES
   a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
   c) Tanks must be hauled as hazardous waste.
   d) This is the place where tanks will be taken for cleaning.

15) TANK HISTORY AND SAMPLING INFORMATION
   Use History - This information is essential and must be accurate. Include tank installation date, products stored in the tank, and the date when the tank was last used.
   Material to be sampled - e.g. water, oil, sludge, soil, etc.

   Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the trig} water mark, etc.

16) CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS
   See attached Table 2.

17) SITE HEALTH AND SAFETY PLAN
   A site specific Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum;
   a) The name and responsibilities of the site health and safety officer.
   b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY: _____
TITLE: ENVIRONMENTAL HEALTH MANAGER
DATE: 11/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

c) Identification of health and safety hazards of each work task. Include potential fire, explosion, physical, and chemical hazards;

SITE HEALTH AND SAFETY PLAN

d) For each hazard, identify the action levels (contaminant concentrations in air) or physical conditions;
e) Description of the work habit changes triggered by the above action levels or physical conditions;
f) Frequency and types of air and personnel monitoring - along with the environmental sampling techniques and instrumentation - to be used to detect the above action levels. Include instrumentation maintenance and calibration methods and frequencies;
h) Confined space entry procedures-(if applicable);
g) Decontamination procedures;
I) Measures to be taken to secure the site, excavation and stockpiled soils during and after work hour (e.g. barricades, caution tape, fencing, trench plates, plastic sheeting, security guard, etc.);
j) Spill containment/emergency/contingency plan. Be sure to include emergency phone numbers, the location of the phone nearest the site, and directions to the hospital near the site;
k) Documentation that all site workers have received the appropriate ASIA approved training and participate medical surveillance per 29 CFR 1910.120;

1) A page for employees to sign acknowledging that they have read and will comply with the site health and safety plan.

The safety plan must be distributed to all employees and contractors working in hazardous waste operations on site. A complete copy of the site health and safety plan along with any standard operating procedures shall be on site and accessible at all times.

Hazardous Waste Operations and Emergency Response; Final Rule, March 6, 1989; Safety plans of certain underground tank sites may need to meet the complete requirements of this Rule.

19) PLOT PLAN
The plan should consist of a scaled view of the facility at which the tank(s) are located and should include the following information:
a) Scale;
b) North Arrow;
c) Property Lines;
d) Location of all structures;
e) Location of all relevant existing equipment including tanks and piping to be removed and dispensers;
f) Streets;
g) Underground conduits, sewers water lines utilities;
h) Existing wells; drinking monitoring, etc;
I) Depth to ground water; and
j) All existing tank(s) and piping in addition to the tank(s) being removed.

20) PERMIT FEE
A check payable to the City of Oakland for the amount indicated must accompany the plans.

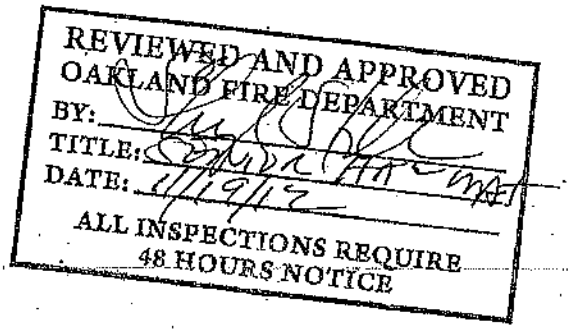
21) Blank unauthorized Leak/Contamination Site Report forms may be obtained in limited quantities from this office or from the San Francisco Regional Water Quality Control Board (510) 286-1255. Larger quantities may be directly from the State Water Resources Control Board at (916) 739-2421.

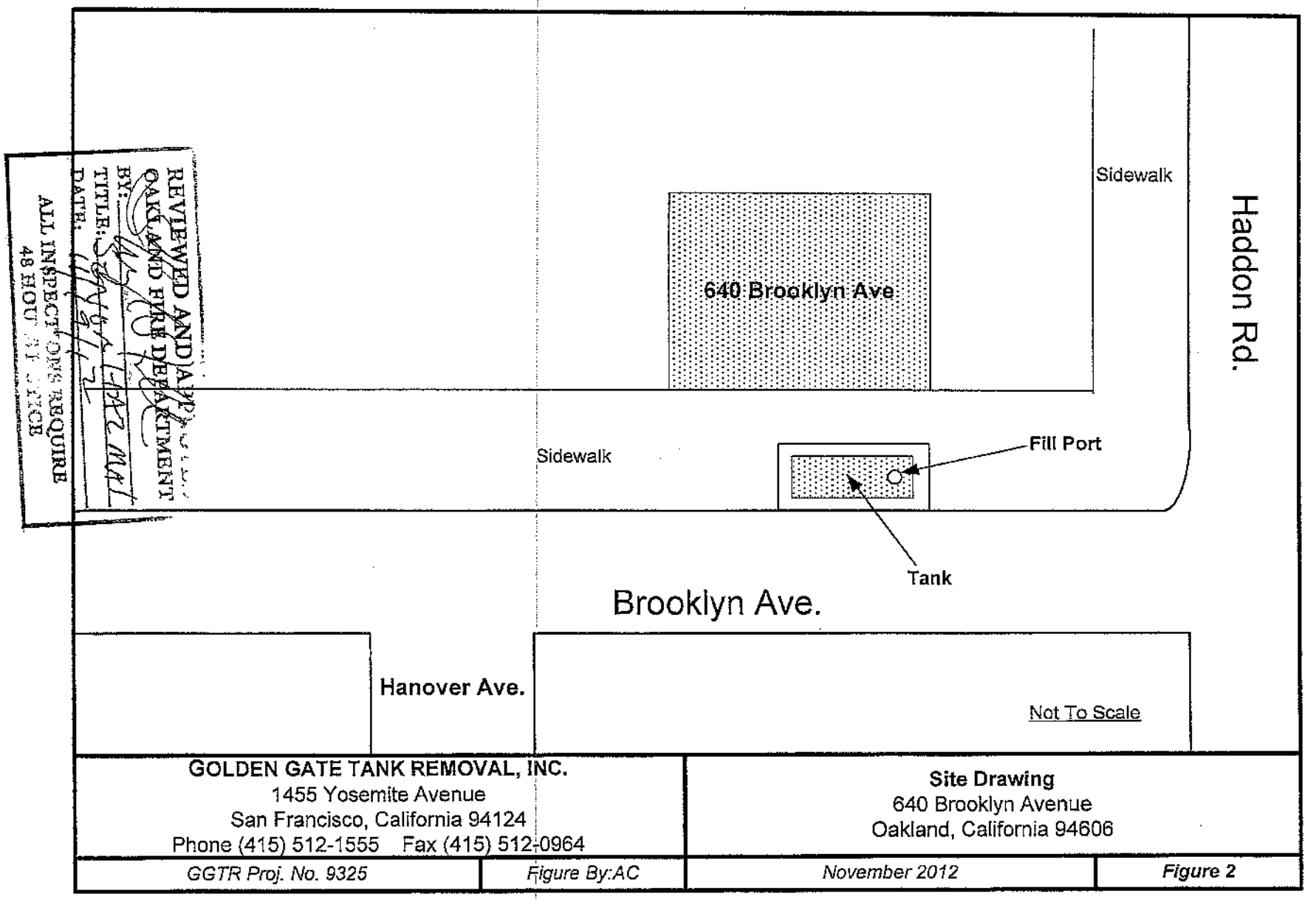
REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY:
TITLE:
DATE: 11/29/11
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

22) TANK CLOSURE REPORT

The Tank Closure reports: General description of the closure activities, indicate;

a) Description of tank, fittings and piping conditions. Size and former contents; note any corrosion, pitting, holes;
b) Description of the excavation itself. Include tank and excavation depth, a log of the stratigraphic units encountered within the excavation, a description of root holes or other potential pathways the depth to any observed ground water, locations of stained or odor-bearing oil, and descriptions of any observed free product or sheen;
c) Detailed description of sampling methods., i.e. - backhoe bucket, drive sampler, bailer, bottles (s), sleeves;
d) Description of any remedial measures conducted at the time of tank removal;
e) To-scale figures showing the excavation size and depth, nearby buildings, sample locations and depths, and tank and piping locations include a copy of the plot plan prepared for the Tank Closure-plan under item #19;
f) Chain of custody records;
g) Copies of signed laboratory reports;
h) Copies of TSDF to Generator Manifests for all hazardous wastes hauled offsite (sludge, Rinsate, tanks and piping, contaminated soil, etc), and
i) Documentation of the disposal of/and volume and final destination all non-manifested contaminated soil disposed offsite.





GOLDEN GATE TANK REMOVAL, INC. 1455 Yosemite Avenue San Francisco, California 94124 Phone (415) 512-1555 Fax (415) 512-0964		**Site Drawing** 640 Brooklyn Avenue Oakland, California 94606	
GGTR Proj. No. 9325	*Figure By:AC*	*November 2012*	***Figure 2***

UNIFIED PROGRAM CONSOLIDATED FORM

TANKS

UNDERGROUND STORAGE TANKS - FACILITY

(one page per site) Page ____ of ____

TYPE OF ACTION (Check one item only) ☐ 1. NEW SITE PERMIT ☐ 3. RENEWAL PERMIT ☐ 4. AMENDED PERMIT ☐ 5.CHANGE OF INFORMATION specify change local use only _____ ☐ 6.TEMPORARY SITE CLOSURE ☐ 7.PERMANENTLY CLOSED SITE ☒ 8. TANK REMOVED 400

I. FACILITY / SITE INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3: 640 Brooklyn Avenue

FACILITY ID# 1:

NEAREST CROSS STREET 401: Haddon Rd.

BUSINESS TYPE 403: ☐ 1. GAS STATION ☐ 2. DISTRIBUTOR ☐ 3. FARM ☐ 4. PROCESSOR ☒ 6. OTHER ☐ 5. COMMERCIAL

FACILITY OWNER TYPE 402: ☐ 1. CORPORATION ☒ 2. INDIVIDUAL ☐ 3. PARTNERSHIP ☐ 4. LOCAL AGENCY/DISTRICT* ☐ 5. COUNTY AGENCY* ☐ 6. STATE AGENCY* ☐ 7. FEDERAL AGENCY*

TOTAL NUMBER OF TANKS REMAINING AT SITE 404: 1 (one)

Is facility on Indian Reservation or trustlands? 405: ☐ Yes ☒ No

*If owner of UST is a public agency: name of supervisor of division, section or office which operates the UST (This is the contact person for the tank records.) 406:

II. PROPERTY OWNER INFORMATION

PROPERTY OWNER NAME 407: Jeffrey Jung

PHONE 408: 650-574-3773

MAILING OR STREET ADDRESS 409: 109 Shooting Star Isle

CITY 410: Foster City

STATE 411: CA

ZIP CODE 412: 94404

PROPERTY OWNER TYPE 413: ☐ 1. CORPORATION ☒ 2. INDIVIDUAL ☐ 3. PARTNERSHIP ☐ 4. LOCAL AGENCY / DISTRICT ☐ 5. COUNTY AGENCY ☐ 6. STATE AGENCY ☐ 7. FEDERAL AGENCY

III. TANK OWNER INFORMATION

TANK OWNER NAME 414: Same as #2

PHONE 415:

MAILING OR STREET ADDRESS 416:

CITY 417:

STATE 418:

ZIP CODE 419:

TANK OWNER TYPE 420: ☐ 1. CORPORATION ☒ 2. INDIVIDUAL ☐ 3. PARTNERSHIP ☐ 4. LOCAL AGENCY / DISTRICT ☐ 5. COUNTY AGENCY ☐ 6. STATE AGENCY ☐ 7. FEDERAL AGENCY

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER

TY (TK) HQ 44- 421: Call (916) 322-9669 if questions arise

V. PETROLEUM UST FINANCIAL RESPONSIBILITY

INDICATE METHOD(s) 422: ☒ 1. SELF-INSURED ☐ 2. GUARANTEE ☐ 3. INSURANCE ☐ 4. SURETY BOND ☐ 5. LETTER OF CREDIT ☐ 6. EXEMPTION ☐ 7. STATE FUND ☐ 8. STATE FUND & CFO LETTER ☐ 9. STATE FUND & CD ☐ 10. LOCAL GOVT MECHANISM ☐ 99. OTHER:

VI. LEGAL NOTIFICATION AND MAILING ADDRESS

Check one box to indicate which address should be used for legal notifications and mailing. Legal notifications and mailings will be sent to the tank owner unless box 1 or 2 is checked. 423: ☐ 1. FACILITY ☐ 2. PROPERTY OWNER ☒ 3. TANK OWNER

VII. APPLICANT SIGNATURE

Certification – I certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF APPLICANT

DATE 424: 11/6/12

PHONE 425: (415) 512-1555

NAME OF APPLICANT (print) 426: Annette Chen - On Behalf of Owner

TITLE OF APPLICANT 427: Project Coordinator

STATE UST FACILITY NUMBER (For local use only) 428:

1998 UPGRADE CERTIFICATE NUMBER (For local use only) 429:

UNIFIED PROGRAM CONSOLIDATED FORM — **TANKS**

UNDERGROUND STORAGE TANKS – TANK PAGE 1

(two pages per tank)

Page ___ of ___

TYPE OF ACTION (Check one item only) ☐ 1 NEW SITE PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY SITE CLOSURE ☐ 7 PERMANENTLY CLOSED ON SITE ☐ 3 RENEWAL PERMIT (Specify reason – for local use only) _____ (Specify reason – for local use only) _____ ☒ 8 TANK REMOVED 430

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 640 Brooklyn Ave., Oakland, CA | 3 | FACILITY ID: | 1

LOCATION WITHIN SITE (Optional) 640 Brooklyn Ave., Oakland, CA 431

I. TANK DESCRIPTION (A scaled plot plan with the location of the UST system including buildings and landmarks shall be submitted to the local agency.)

TANK ID #	TANK MANUFACTURER	COMPARTMENTALIZED TANK
Unknown (432)	Unknown (433)	☐ Yes ☐ No (434) If "Yes", complete one page for each compartment.
DATE INSTALLED (YEAR/MO)	**TANK CAPACITY IN GALLONS**	**NUMBER OF COMPARTMENTS**
Unknown (435)	1500 Gallons (436)	One (437)

ADDITIONAL DESCRIPTION (For local use only) 438

II. TANK CONTENTS

TANK USE (439)
☒ 1. MOTOR VEHICLE FUEL (If marked complete Petroleum Type)
☐ 2. NON-FUEL PETROLEUM
☐ 3. CHEMICAL PRODUCT
☐ 4. HAZARDOUS WASTE (Includes Used Oil)
☐ 95. UNKNOWN

PETROLEUM TYPE (440)
☐ 1a. REGULAR UNLEADED ☐ 2. LEADED ☐ 5. JET FUEL
☐ 1b. PREMIUM UNLEADED ☐ 3. DIESEL ☐ 6. AVIATION FUEL
☐ 1c. MIDGRADE UNLEADED ☐ 4. GASOHOL ☒ 99. OTHER

COMMON NAME (from Hazardous Materials Inventory page) (441): Heating Oil

CAS# (from Hazardous Materials Inventory page) (442):

III. TANK CONSTRUCTION

TYPE OF TANK (Check one item only) (443)
☒ 1. SINGLE WALL ☐ 3. SINGLE WALL WITH EXTERIOR MEMBRANE LINER ☐ 5. SINGLE WALL WITH INTERNAL BLADDER SYSTEM ☐ 95. UNKNOWN
☐ 2. DOUBLE WALL ☐ 4. SIGNLE WALL IN VAULT ☐ 99. OTHER

TANK MATERIAL – primary tank (Check one item only) (444)
☒ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 5. CONCRETE ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☐ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 8. FRP COMPTIBLE W/100% METHANOL ☐ 99. OTHER

TANK MATERIAL – secondary tank (Check one item only) (445)
☐ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 5. CONCRETE ☒ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☐ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 8. FRP COMPTIBLE W/100% METHANOL ☐ 99. OTHER
☐ 5. CONCRETE ☐ 10. COATED STEEL

TANK INTERIOR LINING OR COATING (Check one item only) ☐ 1. RUBBER LINED ☐ 3. EPOXY LINING ☐ 5. GLASS LINING ☒ 95. UNKNOWN (446) DATE INSTALLED (447) _____ (For local use only)
☐ 2 ALKYD LINING ☐ 4 PHENOLIC LINING ☐ 6 UNLINED ☐ 99 OTHER

OTHER CORROSION PROTECTION IF APPLICABLE (Check one item only) ☐ 1 MANUFACTURED CATHODIC ☐ 3 FIBERGLASS REINFORCED PLASTIC ☒ 95 UNKNOWN (448) DATE INSTALLED (449) _____ (For local use only)
☐ 2 SACRIFICIAL ANODE ☐ 4 IMPRESSED CURRENT ☐ 99 OTHER

SPILL AND OVERFILL (Check all that apply) YEAR INSTALLED (450) TYPE (local use only) (451)
☐ 1 SPILL CONTAINMENT
☐ 2 DROP TUBE
☐ 3 STRIKER PLATE

OVERFILL PROTECTION EQUIPMENT:YEAR INSTALLED (452)
☐ 1 ALARM ☐ 3 FILL TUBE SHUT OFF VALVE
☐ 2 BALL FLOAT ☐ 4 EXEMPT

IV. TANK LEAK DETECTION (A description of the monitoring program shall be submitted to the local agency.)

IF SINGLE WALL TANK (Check all that apply) (453)
☐ 1 VISUAL (EXPOSED PORTION ONLY)
☐ 2 AUTOMATIC TANK GAUGING (ATG)
☐ 3 CONTINUOUS ATG
☐ 4 STATISTICAL INVENTORY RECONCILIATION (SIR) BIENNIAL TANK TESTING
☐ 5 MANUAL TANK GAUGING (MTG)
☐ 6 VADOSE ZONE
☐ 7 GROUNDWATER
☐ 8 TANK TESTING
☐ 99 OTHER

IF DOUBLE WALL TANK OR TANK WITH BLADDER (Check one item only) (454)
☐ 1 VISUAL (SINGLE WALL IN VAULT ONLY)
☐ 2 CONTINUOUS INTERSTITIAL MONITORING
☐ 3 MANUAL MONITORING

IV. TANK CLOSURE INFORMATION / PERMANENT CLOSURE IN PLACE

ESTIMATED DATE LAST USED (YR/MO/DAY)	ESTIMATED QUANTITY OF SUBSTANCE REMAINING	TANK FILLED WITH INERT MATERIAL?
Unknown (455)	Unknown (456) gallons	☐ Yes ☒ No (457)

UNIFIED PROGRAM CONSOLIDATED FORM

TANKS

UNDERGROUND STORAGE TANKS – TANK PAGE 2

VI. PIPING CONSTRUCTION (Check all that apply)

UNDERGROUND PIPING		ABOVEGROUND PIPING	
SYSTEM TYPE	☐ 1. PRESSURE ☒ 2. SUCTION ☐ 3. GRAVITY 458	☐ 1. PRESSURE ☐ 2. SUCTION ☐ 3. GRAVITY	459
CONSTRUCTION	☒ 1. SINGLE WALL ☐ 3. LINED TRENCH ☐ 99. OTHER 460	☐ 1. SINGLE WALL ☐ 95. UNKNOWN	462
MANUFACTURER	☐ 2. DOUBLE WALL ☐ 95. UNKNOWN	☐ 2. DOUBLE WALL ☐ 99. OTHER	
MANUFACTURER	461	MANUFACTURER	463
☒ 1. BARE STEEL	☐ 6. FRP COMPATIBLE w/100% METHANOL	☐ 1. BARE STEEL	☐ 6. FRP COMPATIBLE W/100% METHANOL
☐ 2. STAINLESS STEEL	☐ 7. GALVANIZED STEEL ☐ Unknown	☐ 2. STAINLESS STEEL	☐ 7. GALVANIZED STEEL
☐ 3. PLASTIC COMPATIBLE W/ CONTENTS	☐ 99. Other	☐ 3. PLASTIC COMPATIBLE W/ CONTENTS	☐ 8. FLEXIBLE (HDPE) ☐ 99. OTHER
☐ 4. FIBERGLASS	☐ 8. FLEXIBLE (HDPE)	☐ 4. FIBERGLASS	☐ 9. CATHODIC PROTECTION
☐ 5. STEEL W/COATING	☐ 9. CATHODIC PROTECTION 464	☐ 5. STEEL W/COATING	☐ 95. UNKNOWN 465

VII. PIPING LEAK DETECTION (Check all that apply) (A description of the monitoring program shall be submitted to the local agency.)

UNDERGROUND PIPING

SINGLE WALL PIPING 466

PRESSURIZED PIPING (Check all that apply):

☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS.

☐ 2. MONTHLY 0.2 GPH TEST

☐ 3. ANNUAL INTEGRITY TEST (0.1GPH)

CONVENTIONAL SUCTION SYSTEMS

☐ 5. DAILY VISUAL MONITORING OF PUMPING SYSTEM + TRIENNIAL PIPING INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALUES IN BELOW GROUNDPIPING):

☐ 7. SELF MONITORING

GRAVITY FLOW

☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING (Check all that apply):

10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)
  - ☐ a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
  - ☐ b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
  - ☐ c. NO AUTO PUMP SHUT OFF

☐ 11. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITH FLOW SHUT OFF OR RESTRICTION

☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM

☐ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY (Check all that apply)

☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF * AUDIBLE AND VISUAL ALARMS

☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITHOUT FLOW SHUT OFF OR RESTRICTION

☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)

☐ 17. DAILY VISUAL CHECK

ABOVEGROUND PIPING

SINGLE WALL PIPING 467

PRESSURIZED PIPING (Check all that apply):

☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS.

☐ 2. MONTHLY 0.2 GPH TEST

☐ 3. ANNUAL INTEGRITY TEST (0.1GPH)

☐ 4. DAILY VISUAL CHECK

CONVENTIONAL SUCTION SYSTEMS (Check all that apply)

☐ 5. DAILY VISUAL MONITORING OF PIPING AND PUMPING SYSTEM

☐ 6. TRIENNIAL INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):

☐ 7. SELF MONITORING

GRAVITY FLOW (Check all that apply):

☐ 8. DAILY VISUAL MONITORING

☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING (Check all that apply):

10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)
  - ☐ a AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
  - ☐ b AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
  - ☐ c NO AUTO PUMP SHUT OFF

☐ 11. AUTOMATIC LEAK DETECTOR

☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM

☐ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY (Check all that apply)

☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF * AUDIBLE AND VISUAL ALARMS

☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST)

☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)

☐ 17. DAILY VISUAL CHECK

VIII. DISPENSER CONTAINMENT

DISPENSER CONTAINMENT

DATE INSTALLED 468

- ☐ 1. FLOAT MECHANISM THAT SHUTS OFF SHEAR VALVE
- ☐ 2. CONTINUOUS DISPENSER PAN SENSOR + AUDIBLE AND VISUAL ALARMS
- ☐ 3. CONTINUOUS DISPENSER PAN SENSOR WITH AUTO SHUT OFF FOR DISPENSER + AUDIBLE AND VISUAL ALARMS
- ☐ 4. DAILY VISUAL CHECK
- ☐ 5. TRENCH LINER / MONITORING
- ☐ 6. NONE 469

IX. OWNER/OPERATOR SIGNATURE

I certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF OWNER/OPERATOR	DATE 470
	11/6/12
NAME OF OWNER/OPRATOR (print) 471	TITLE OF OWNER/OPERATOR 472
Annette Chen - On Behalf of Owner	Project Coordinator

Permit Number (For local use only) 473	Permit Approved (For local use only) 474	Permit Expiration Date (For local use only) 475

ONSITE CUTTING OF UNDERGROUND TANKS

Various circumstances at underground tank removals may make on-site cutting of tanks necessary or advantageous. Due to the inherent safety, health and environmental hazards, Golden Gate Tank Removal, Inc. has imposed the following conditions on cutting of any tanks that have held hazardous material of waste.

1. The local fire department shall be advised in advance of planned on-site cutting, or of any change from approved plans to include on-site cutting. The cutting of any tank that previously held flammable and/or combustible liquids shall be approved in advance by the local Fire Department inspector.

2. Tanks shall be completely emptied and the contents handled in accordance with all pertinent regulations.

3. To minimize release of the hazardous waste, any tank to be cut in place shall be cleaned thru triple rinse with water to render it non-hazardous. The final Rinsate or interior wipe sample shall not exceed 100 PPM of product verified by laboratory analysis: or the tank shall be evinced as cleaned to bare metal. Rinsate shall behandled in accordance with all pertinent regulations.

4. Any tank that held flammable or combustible liquid shall be inerted prior to cutting. A minimum of 3 pounds of dry ice per 100 gallons of capacity shall be used for a flammable liquid tank. The atmosphere in the tank shall be maintained below 5% of Lower Explosive Limit (LEL) throughout cutting and oxygen level will be monitored and should be 0%.

5. Cutting implements shall be approved for use prior to the cutting of any tank. Tanks that are properly inerted may be cut with sazaw only with approval from the local Fire Department. Edged tools may be used in the tank if it is properly inerted. Edged tools shall be lubricated with cutting oil or water spray.

6. At least one charged 20BC Fire extinguisher shall be kept on-site, immediately accessible to the workers performing the cutting.

7. Occupational Health and Safety provisions of Title 8, California Code of Regulations, shall be observed, including but not limited to site safety plans, confined space entry, respirators and other personal protection equipment and sanitation.

8. All other pertinent regulations, including but not limited to those of the local departments of Public Health, Fire and Public Works, the Bay Area Air Quality Management District and the Bay Regional Water Quality Control Board, shall be observed.

1455 Yosemite Avenue - San Francisco, CA 94124 - Tel.: 415.512.1555 Fax: 415.512.0964
General Engineering Contractors License No. 616521

REVIEWED AND APPROVED
OAKLAND FIRE DEPARTMENT
BY:
TITLE: Station Hazmat
DATE: 4/19/12
ALL INSPECTIONS REQUIRE
48 HOURS NOTICE

SITE SAFETY PLAN
UST REMOVAL

640 BROOKLYN AVENUE
OAKLAND, CA 94606

November 6, 2012

GOLDEN GATE TANK REMOVAL, INC.
1455 YOSEMITE AVENUE
SAN FRANCISCO, CALIFORNIA 94124

PROJECT # 9325

1455 Yosemite Avenue - San Francisco, CA 94124 - Tel.: 415.512.1555 Fax: 415.512.0964
General Engineering Contractors License No. 616521

640 Brooklyn Avenue, Oakland, California, 94606

SITE HAZARD INFORMATION

PLEASE PROVIDE THE FOLLOWING INFORMATION FOR THE SITE

Owners Name: Jeffrey Jung
Site Address: 640 Brooklyn Avenue
Oakland, CA 94606
Directions to Site: Cross Street: Haddon Rd.

Consultant On Site: Golden Gate Tank Removal, Inc. **Phone number:** 415/512-1555
Site Safety Officer: Tim Hallen **Phone Number:** 415/512-1555
Type of Facility: commercial **Mobile Number:** 415/559-0499

Site Activities: ☐ Drilling ☐ construction x Tank Excavation ☐ Soil Excavation
☐ Work in Traffic Area ☐ Groundwater Extraction ☐ Vapor Extraction ☐ Above Ground Remediation
☐ Other:

Hazardous Substances

Name (CAS#)	Expected Concentration	Health Affects
Heating Oil	Minimal	Nausea,Dizziness

Physical Hazards

x Noise
x Traffic
x Underground Hazards
☐ Overhead Lines
x Excavations/Trenches
☐ Other:
Potential Explosions and Fire hazards:

Level of Protection Equipment

☐ A ☐ B ☐ C X D X See Personal Protective Equipment

Personal Protective Equipment

R = Required A = As Needed

R	Hard Hat	A	Safety Eye wear (Type)
A	Safety Boots	A	Respirator (Type) 1/2 Face
R	Orange Vest	A	Filter (Type) Carbon
A	Hearing Protection	A	Gloves (Type) Leather
	Tyvek Coveralls		Other

SITE HAZARD INFORMATION

Monitoring Equipment On Site

☐ Organic Vapor Analyzer
☐ Oxygen Meter
☐ H2S Meter
☐ Air Sampling Pump
X Combustible Gas Meter
☐ Other

640 Brooklyn Avenue, Oakland, California, 94606

Site Control Measures Normal Pedestrian, Orange Cones, Traffic Signs, NO SMOKING Signs

Decontamination Procedures Warm Water Soap

Hospital/Clinic Alameda County Medical Center Phone 510-437-4800
Hospital Address 1411 E 31st St., Oakland, CA 94602
Paramedic 911 Fire Dept. 911 Police Dept. 911

Emergency/Contingency Plans & Procedures See Safety Procedures

Site Hazard Information Provided By: Annette Chen Phone: 415/512-1555

Signature: Date: 11/6/12

1.0 PURPOSE

This operating procedure establishes minimum procedures for protecting personnel against the hazardous properties during the performance of the removal of an underground storage tank and related activities. All employees and subcontractors of Golden Gate Tank Removal shall follow this plan. This plan is developed to work with the California Occupational Safety and Health Code to quickly prepare and issue a site safety plan for the removal of an underground storage tank and the related activities.

2.0 APPLICABILITY

This procedure is applicable to the removal of underground storage tanks and hydrocarbon contaminated soil excavation and the related activities. Listed below are some of, but not limited to, the activities and substances that may be encountered during the project.

Activities:

The work to be performed will include: the excavation of potentially contaminated soil in order to expose the underground storage tank(s), the stock piling of soil, the removal and disposal of the storage tanks and related equipment, the recovery of soil samples from the excavation and the backfill and resurfacing of the excavation.

Substances:

- Diesel Fuel Oil (Home Heating Oil)
- Lead and Unleaded Gasoline
- Diesel Fuel
- Motor Oil (used and unused)
- Hydraulic Oil

3.0 RESPONSIBILITY AND AUTHORITY

Personnel responsible for project safety are the business unit's Health and Safety Officer (HSO), the Project Manager (PM), and the Site Safety Officer (SSO).

The HSO is responsible for reviewing and approving the site safety plan and advising both the PM an SSO on health and safety matters. The HSO has the authority to audit compliance with the provisions of the site safety plan, suspend work or modify work practices for safety reasons, and to dismiss from the site any individual whose conduct on-site endangers the health and safety of themselves and/or others.

The PM is responsible for having the site safety plan prepared and distributed to all field personnel and to an authorized representative of each firm contracted to assist with the on-site work.

The SSO is responsible for assisting the PM with on-site implementation of site safety plan. The SSO may suspend work anytime he/she determines that the provisions of the site safety plan are inadequate to ensure worker safety and inform the PM and HSO of individuals whose on-site behavior jeopardizes their health and safety or the health and safety of others.

4.0 HAZARD EVALUATION/CRITERIA

Chemical

The general types of chemical hazards associated with this project are exposure to various chemical substances, including but not limited to, petroleum hydrocarbon liquids and vapors, caustic and acidic mists, liquids and solids. Exposure to elevated levels of hydrocarbon vapors presents potential health risks that need to be properly controlled. Work practices and methods will be monitored to limit exposures. Where elevated exposures persist, respiratory protection will be the primary control method to protect personnel from inhalation of hydrocarbon vapors.

Physical

The general types of physical hazards associated with this project are:

- Mechanical hazards: swinging objects, machinery, etc.,
- Physical lifting, shoveling, climbing (ladder), etc.,
- Electrical hazards: buried cables and overhead power lines,
- Thermal hazards: heat stress, and heat exhaustion
- Acoustical hazards: excessive noise created by machinery.

Flammability

The general types of flammable hazards associated with this project are fire hazards: natural gas and product lines, flammable petroleum hydrocarbons, and motor driven equipment.

Petroleum distillate fuels posses two intrinsic hazardous properties, namely, flammability and toxicity. The flammable property of the oil and fuels presents a far greater hazard to field personnel than toxicity because it is difficult to protect against and can result in catastrophic consequences. Being Flammable, the vapors of volatile components of crude oil and the fuels can be explosive when confined.

Eliminating any one of the three factors needed to produce combustion can minimize the probability of fire and explosion. Two of the factors, ignition source and vapor concentration, can be controlled in many cases. Prohibiting open fires and smoking on-site, installing spark arrestors on engines and turning off engines when lel is approached can control ignition. Introducing dry ice (solid carbon dioxide) in the tank can reduce vapor concentrations in the headspace; the carbon dioxide gas will displace the combustible vapors.

5.0 HEALTH AND SAFETY DIRECTIVES

Site-Specific Safety Briefing

Before fieldwork begins, all field personnel, including subcontractor employees must be briefed on their work assignments and safety procedures contained in this document.

Personal Protective Equipment

Each field team member shall have on-site, before the commencement of work, the following personal protective equipment:

- NIOSH-approved full or half face respirator with organic vapor cartridges (cartridges will be supplied pending the work criteria).
- Hard-hat and safety vest
- Leather work boots, steel toed boots are strongly suggested
- Leather work gloves
- Ear protection, earphone type or ear plugs
- Eye protection, safety glasses and splash proof goggles

Equipment Usage

Hard-hats and safety vests must be worn at all times when on the job site.

Safety goggles must be worn when working within 10 feet of any operating heavy equipment (e.g., jackhammer, and backhoe). Splash-proof goggles or face shields must be worn whenever product quantities of fuel are encountered.

Respirators must be worn whenever total airborne hydrocarbon levels in the breathing zone of field personnel reach or exceed a 15-minute average of 25 ppm. If total airborne hydrocarbons in the breathing zone exceed 100 ppm, work must be suspended, personnel directed to move a safe distance from the source, and the HSO or designee consulted.

Chemical-resistant safety boots must be worn during the performance of work where surface soil is obviously contaminated.

Monitoring

Personal exposure to ambient airborne hazards will be monitored to assure that personnel exposures do not exceed acceptable limits and that appropriate selection of protective equipment items is made. If concentrations approach criteria levels, all personnel will be notified of possible site safety changes. Audits will be conducted by the Safety Officer to insure compliance with the Safety Plan and to provide additional support as required.

Area Control

Access to hazardous and potential hazardous work sites must be controlled to reduce the probability of occurrence of physical injury and chemical exposure of field personnel, visitors and the public. A hazardous or potential hazardous area includes area where a tank removal or related activity is being performed and/or field personnel are required to wear respirators.

Cordons, barricades, and/or emergency traffic cones or posts, depending on conditions must identify the boundaries of hazardous and potentially hazardous areas. If such areas are left unattended, signs warning of the danger and forbidding entry must be placed around the perimeter if the areas are accessible to the public. Trenches and other large holes must be guarded with wooded or metal barricades spaced no further than 20 feet apart and connected with yellow caution tape. The barricades must be placed no less than two feet from the edge of the excavation or hole.

Entry to hazardous areas shall be limited to individuals who must work in those areas. Unofficial visitors must not be permitted to enter hazardous areas while work in those areas is in progress.

Official visitors should be discouraged from entering hazardous areas, but may be allowed to enter only if they agree to abide by the safety officer and are informed of the potential dangers that could be encountered in the areas.

Decontamination

Field decontamination of personnel and equipment is not required except when contamination is obvious (visual or by odor). Recommended de-contamination procedures follow:

Personnel

Gasoline, heating oil, diesel and oil should be removed from skin using a mild detergent and water. Hot water is more effective that cold. Liquid dishwashing detergent is more effective than hand soap. If weathered to an asphaltic condition, mechanics waterless hand cleaner is recommended for initial cleaning followed by detergent and water.

Equipment

Gloves, respirators, hard-hats, boots and goggles should be cleaned as described under personnel. However, if boots do not become clean after washing with detergent and water, they should be cleaned with a strong solution of trisodium phosphate and hot water. If this fails, clean with diesel oil followed by detergent and water to remove diesel oil.

Sampling equipment, augers, vehicle undercarriages, and tires should be steamed cleaned. The steam cleaner is a convenient source of hot water for personnel and protective equipment cleaning.

6.0 SAFETY AND HEALTH TRAINING

Each individual on the job site should have been or is preparing to attend the 40 hr. Hazardous Materials Handling Course as required be the California Occupational Safety and Health Association. In addition, the HSO conducts BI-weekly health and safety meetings.

Each morning before fieldwork begins, all field personnel, including subcontractor employees, must attend the site-specific safety briefing at their work site to receive assignments and safety procedures.

7.0 RECORD KEEPING REQUIREMENT

The following record keeping requirements will be maintained in the program file indefinitely. The particular organization responsible for these records is also listed.

- Copy of this Health and Safety Plan - Golden Gate Tank Removal.
- Health and Safety Training Certification Form for Site Safety Officer -- Golden Gate Tank Removal.
- Any accident/illness report forms -- All Parties.
- Personal sampling results -- Golden Gate Tank Removal.
- Documentation of employee's medical ability to perform work and wear respirators -- All parties.

Prepared By:

Annette Chen
Golden Gate Tank Removal, Inc.

250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, California 94612

EXCAVATION

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK — **CIVIL ENGINEERING**

VALID FOR 90 DAYS FROM DATE OF ISSUANCE

PERMIT NUMBER		SITE ADDRESS
X 1 1 0 ___ ___ ___ ___		640 Brooklyn Ave., Oakland, CA 94606
APPROX START DATE: A.S.A.P.	APPROX END DATE:	24-HOUR EMERGENCY PHONE NUMBER: 415-512-1555
CONTRACTOR'S LICENSE NUMBER AND CLASS: 616521 A-HAZ, C-8		CITY BUSINESS TAX #: 1307584

ATTENTION:

- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 811. Underground Service Alert (USA) #: 418438
- 48 hours prior to starting work, you must **call 510-238-3651** to schedule an inspection.
- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec.7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to it's issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt there from and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

- ☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale).
- ☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption in this subdivision on more that two structures more than once during any three-year period. (Sec. 7044, Business and Professions Code).
- ☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law).
- ☐ I am exempt under Sec. _____ B&PC for this reason _____

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab C). Policy # 1947693-2011 Company Name State Compensation Ins. Fund

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT

If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12, Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, it officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X _____ 11/7/12

Signature of Permittee ☐ Agent for ☐ Contractor ☐ Owner Date

DATE STREET LAST RESURFACED:	SPECIAL PAVING DETAIL REQUIRED: ☐ YES ☐ NO	HOLIDAY RESTRICTIONS? (NOV 1 – JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM – 8AM & 4 PM – 6PM) ☐ YES ☐ NO

ISSUED BY:	DATE ISSUED:

JOHN CARVER CONSULTING
Civil Engineer 23772

PROJECT:	Underground Storage Tank Removal	Project:	9325
ADDRESS:	640 Broklyn Avenue, Oakland, California	Date:	11/07/2012
FOR:	GOLDEN GATE TANK REMOVAL	Page:	1 of 6

TANK EXCAVATION SHORING CALCULATIONS

Wooden shoring designed as temporary braced cofferdam

INDEX

SUMMARY

Maximum depth of Excavation	6 feet	
Maximum size of Excavation	11 feet by 6 feet	
Lagging	3 x12 Douglas Fir or Larch dense,	select structural for 11 foot side
	2 x12 Douglas Fir or Larch dense,	construction for 6 foot side
Soldier Beams	4x4 Douglas Fir or Larch	Construction Grade
Struts	4x4 Douglas Fir or Larch	Construction Grade

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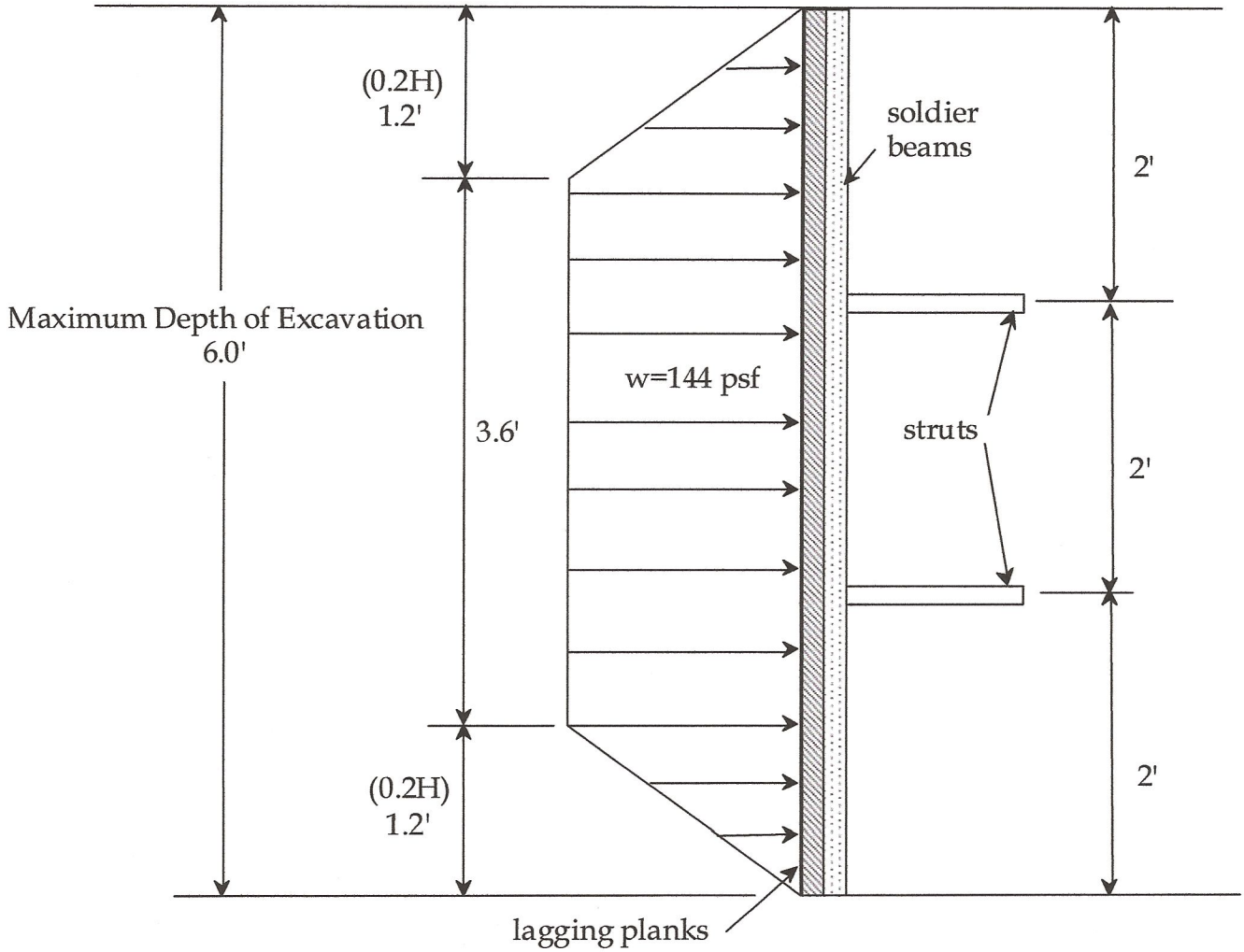
ADDRESS:	640 Broklyn Avenue, Oakland, California	Date:	11/07/2012
FOR:	GOLDEN GATE TANK REMOVAL	Page:	2 of 6

Soil Parameters for general braced excavations in typical San Francisco soils



SOIL PRESSURE DIAGRAM

Assumed Soil Properties: No surcharge load,
Medium dense sand to clayey sand, water table below excavation.
K = 0.30, active soil pressure for medium dense sand, NAVDOC
δ = 0 angle of wall friction, (conservative)
Γ = 100 pounds per cubic foot (dry density of soil)
w = (0.8) (K) (H) (G) cos 0° = (0.8) (0.3) (6) (100) (1) = 144 psf

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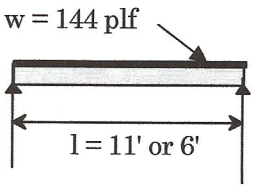
Design of Lagging Planks



$$M_{11} = \frac{wl^2}{8} = \frac{(144)(11)(11)}{8} = 2178 \text{ ft-lbs}$$

$$M_6 = \frac{wl^2}{8} = \frac{(144)(6)(6)}{8} = 648 \text{ ft-lbs}$$

For 11 foot length, try 3 x 12 plank, Douglas Fir or Larch dense select
F_b= 2050 psi.
For 6 foot length try 2 x 12 DF or L, dense construction, F_b = 1750 psi.

$$S_{11} = \frac{bd^2}{6} = \frac{(11.5)(2.5)(2.5)}{6} = 12 \text{ inch}^3$$

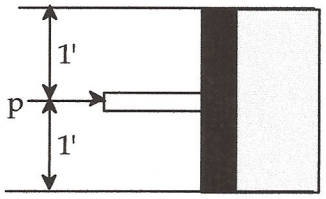
$$S_{reqd} = \frac{Mb}{F_b} = \frac{(2178)(11.5)}{(2050)} = 12.2 \approx 12 \text{ OK}$$

$$S_6 = \frac{(11.5)(1.5)(1.5)}{6} = 4.3 \text{ inch}^3$$

$$S_{reqd} = \frac{(648)(11.5)}{(1750)} = 4.3 \text{ OK}$$

Design of Soldier Beam (bending on both axis)

Excavation 11' x 6'



$$M = \frac{Pl}{4}$$

$$M_y = \frac{Pl}{4} = \frac{(792)(2)}{4} = 396 \text{ ft-lbs}$$

$$M_x = \frac{Pl}{4} = \frac{(432)(2)}{4} = 216 \text{ ft-lbs}$$

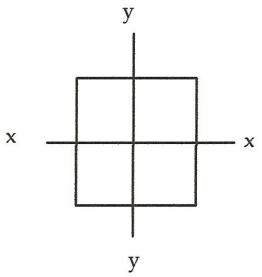
$$\frac{M_x}{S_x} + \frac{M_y}{S_y} \leq F_b = 1350 \text{ psi}$$

$p_y = (144)(5.5) = 792$ lbs

$p_x = (144)(3.5) = 432$ lbs

Try 4 x 4 soldier beam

$$\frac{396 \text{ ft-lbs (12 in/ft)}}{\frac{(3.5)^3}{6}} + \frac{216 \text{ ft-lbs (12 in/ft)}}{\frac{(3.5)^3}{6}}$$



= 665 + 362 = 1027 psi ≤ 1350. Use 4 x4 Construction grade DF

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Design of Struts

Try 4" x 4 D.F. L. Construction grade, actual dimensions are 3.5" x 3.5"

P = load on strut = 2' x 5.5' x 144 psf = 1584 lbs

L = length of strut = 6'

d = thickness of strut = 3.5"

$$\frac{L}{d} = \frac{6 \text{ ft} \times 12 \text{ in/ft}}{3.5"} = 21 \geq 11, \text{ as intermediate column and } \leq 50,$$ design as simple solid column.

$$F'_c = \frac{0.30E}{\left(\frac{L}{d}\right)^2} = \frac{(0.30)\ (1{,}500{,}000)}{(21)^2} = 1020 \text{ psi}$$

Allowable Load = $P_a = (F'_c)(d)^2 = (1020)\ (3.5)\ (3.5) = 12{,}495 \geq 1584$ lbs

4" x 4" D.F. L. Construction grade OK

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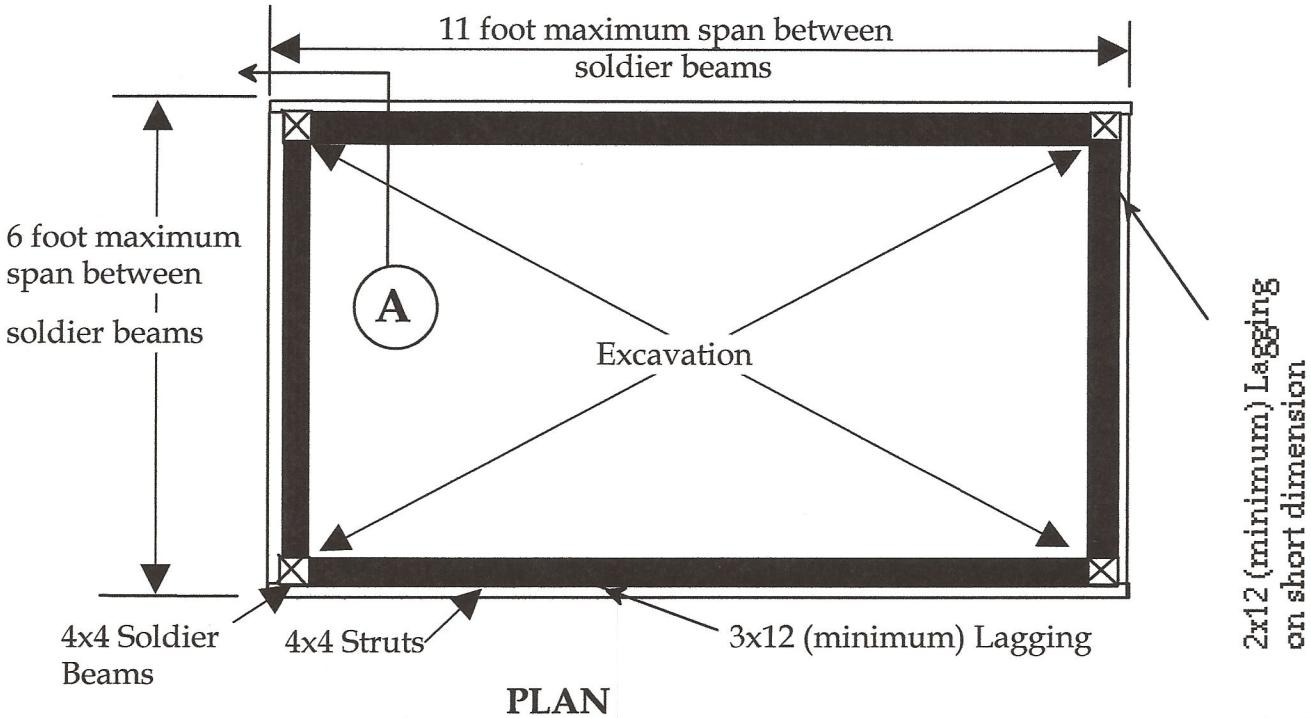
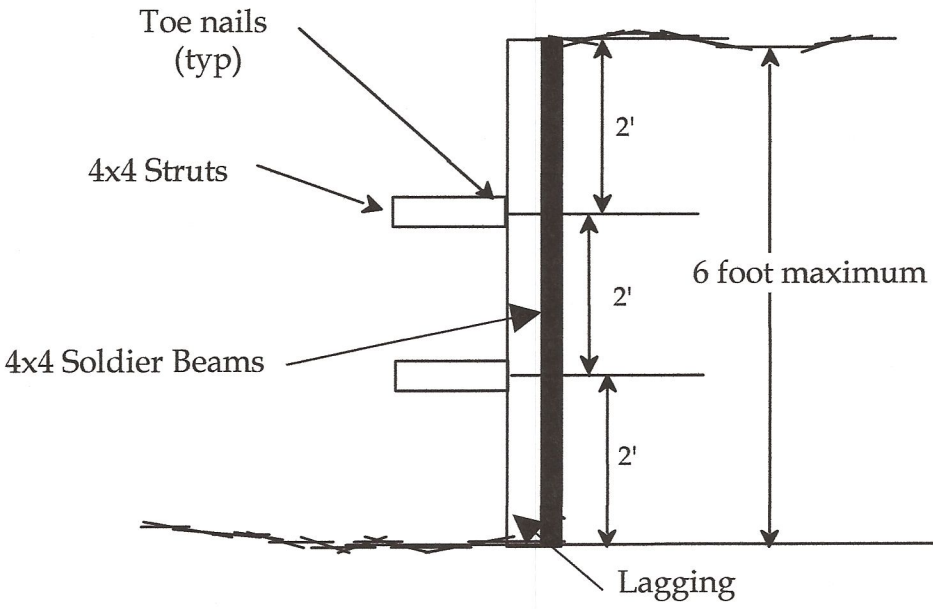


PLAN



Section A

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REGISTERED PROFESSIONAL ENGINEER
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GENERAL NOTES

GENERAL NOTES

1. All construction shall conform to the local Building and Safety Codes and to the rules and regulation of all agencies having jurisdiction.
2. The Contractor shall verify all existing grades as shown on the drawings and any variation which would modify the shoring system shall be reported to the engineer.
3. General site excavation, installation of shoring system work shall be coordinated with the tank removal to prevent loss of ground and caving of banks.
4. Shoring systems are intended only as a temporary means of retaining the excavated banks during tank removal.
5. The Engineer or an authorized testing and inspection agency, shall provide intermittent observation services for installation of shoring system to confirm conformance of the work with the drawings. Such service shall be furnished by General Contractor or Owner of Project.
6. Shoring system design was based on soil information provided by John Carver Consulting Civil Engineer on nearby properties.
7. Settlement and deflection readings, if required shall be made by a qualified surveyor provided by the General Contractor.
8. The Contractors shall verify the location of all utilities and shall protect from harm as required to prevent damage and to maintain their use. Consult the engineer if utility lines or piping are encountered during shoring construction. Use care in installation so that indications of utilities in the way are recognized.
9. All structural details or shapes shown are minimum sizes required, equal or greater sizes may be substituted with the Engineer's prior approval.
10. Any damage to adjoining properties, streets, or utilities, caused by shoring work shall be repaired and restored to original condition at Shoring Contractors expense.
11. Stockpiling or storage of materials on or near shoring bulkhead is not permitted unless noted on drawings or with prior approval of the Engineer.
12. Any conditions which vary from the basic assumptions made in these calculations shall be brought to the attention of the engineer. Additional details will be provided for actual conditions.

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